

R. MARTIN HARRISON
L. B. HILL

Excavations at
Sarachane in
Istanbul, Volume 1



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Excavations at Saraçhane in Istanbul

VOLUME 1

EXCAVATIONS AT SARACHANE IN ISTANBUL

VOLUME 1

The Excavations, Structures,
Architectural Decoration, Small Finds,
Coins, Bones, and Molluscs

BY

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WITH CONTRIBUTIONS BY

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To
the memory of
NEZIH FIRATLI
(1921-1979)
in gratitude

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PREFACE

R. M. HARRISON

THE EXCAVATIONS described in this and the subsequent volume were carried out in the years 1964 to 1969 by Dumbarton Oaks and the Archaeological Museum of Istanbul under the joint direction of Dr. Nezih Fıratlı and the present writer. Those who worked with us on the site know how very much we all owe to Dr. Fıratlı's constant help and advice and encouragement, to his unrivalled knowledge of Istanbul's Roman and Byzantine archaeology, and, quite simply, to his lively and smiling inspiration. Our debt is incalculable, and his early death in March 1979 after long illness is a very bitter loss.

Dr. Fıratlı was to have written the first chapter, covering the excavation by heavy machinery of the underpass-crossing in the winter of 1964-5, which he monitored, and the catalogue of pre-church sculpture. Although what appears here as the first part of chapter 2 is a poor substitute for what he would have written, this and all subsequent chapters owe a great deal to his observation and insight.

In addition to Dr. Fıratlı and the writer, the team in 1964 consisted of Mr. Gordon R. J. Lawson (architect), Dr. John W. Hayes (pottery specialist), and Mrs. Elizabeth Harrison (photographer). These five continued to work for each of the six seasons, and we were joined in 1965 by Mr. C. Arthur, Dr. N. Asgari, Miss Ü. Izmirligil, and Miss P. Pfeiffer; in 1966 by Misses Y. Akyürek, I. Muslubas, Pfeiffer, E. Sanford, M. Turunç, and M. Williams; in 1967 by Mr. M. Alişan, Miss S. Barutcu, Mr. O. Belener, Mr. C. Burgess, Professor G.D.B. Jones, Mr. J. Little, Miss Pfeiffer, Mr. S. Şişmanoğlu, and Mr. M. J. Vickers; in 1968 by Mr. E. Akyildiz, Miss Barutcu, Mr. S. Eriz, Dr. Margaret V. Gill, Miss Izmirligil, Mr. Şişmanoğlu, Mr. J. Tait, Miss G. Uluğ, and Mr. Vickers; in 1969 by Dr. Gill, Mr. Şişmanoğlu, and Mr. and Mrs. Vickers.

Hired labour rose from fifteen in the first campaign to sixty-seven in the fourth and consisted almost entirely of villagers from Tokat, some 800 kilometres east of Istanbul, seeking work in Istanbul before their up-

land harvest. Three of the original fifteen, Ali Eryiğit, Sabahattin Yurtseven, and Recep Çelik, served us for all six seasons and deserve special mention, as does our tough and indomitable foreman, Şerif Çavuş. In 1967 all but two of the sixty-seven workmen came from neighbouring villages in Tokat. We owe much to their hard and careful work and to their absolute reliability and high morale.

Further work in Istanbul, on site and in the Museum, was carried out in a series of study-seasons, by Mr. D. Brothwell (human bones) and Professor K. Kosswig (animal bones and molluscs) in 1969, Dr. Hayes in 1970 and annually to 1979, Mr. Lawson in 1971, Dr. Michael Hendy (Roman and Byzantine coins) in 1973 and 1974, Mr. Stephen J. Hill (brickstamps) in 1975, and the writer in 1971 and annually to 1976.

Grateful acknowledgement is made to Mr. Necati Dolunay, Director of the Istanbul Archaeological Museum throughout our work (until his retirement in 1978 and succession by Dr. Fıratlı), and to his staff for technical and practical help; special mention must be made of the Museum's Laboratory services and of Mr. Mehmet Tunçdağ for his expert pottery- and marble-mending. We had ready access to the Museum at all times, not only to work on recently excavated Sarıçane material there, but to seek comparanda and to consult specialist departments, such as Conservation and Coins. We particularly valued the assistance on site of many members of the Museum's staff, which helped to make this excavation an effective collaboration.

For support and encouragement, thanks are also due to the Turkish Directorate-General of Antiquities in Ankara, which issued and each year renewed the necessary permit, and whose Director in those years, Mr. Hikmet Gürçay, we were privileged to welcome on the site each summer.

At Dumbarton Oaks we owe a particular debt of gratitude to Mr. J. Thacher, Professor Ernst Kitzinger, and the late Professor Paul A. Underwood, who initiated the project and supported us unstintingly through-

PREFACE

out the excavation: also to Miss J. Warner for her efficient editorial work on the five preliminary reports. We are grateful too to Professor W. C. Loerke and Professor G. Constable, who have successively overseen and assisted subsequent progress from Dumbarton Oaks.

Regular visitors to the site to whom we owe an enormous amount include Professor Semavi Eyice, Mr. E.J.W. Hawkins, Professors R. Krautheimer, D. Kuban, C. Mango, T. Mathews, I. Ševčenko, and C. L. Striker; less frequent but highly valued visitors include Dr. M. H. Ballance, Professor O. Feld, Miss A. Frantz, Mrs. T. Mackie, Mr. A.H.S. Megaw, and Dr. J. B. Ward-Perkins. The list of all who toured the site and contributed ideas or information is too numerous to be given in full, and many suggestions first made in the trenches or in one of the work-sheds will have been tested and incorporated into the text without specific acknowledgement: one of the benefits of working in such an exposed urban site was the stream of visitors and constant discussion. Amongst the very many other scholars from whom I have benefited either in discussion or in correspondence are Professors F. W. Deichmann, A. and O. Grabar, J. Lassus, U. Peschlow, E. Porada, J.-P. Sodini, H. Stern, and K. Weitzmann, and Professor Mango's advice on many points has been of particular value.

In 1978 a post-excavation grant from Dumbarton Oaks enabled a number of short-term appointments to be made at Newcastle. Mrs. Lynn Ritchie has served as research assistant, indexing for the first time all Sarāçhane records and providing at last the indispensable groundwork and collation for the writing of the majority of the text. Miss V. Southwell and Mr. S. Bradwel successively as photographers, and Miss M. Finch as draughtswoman. Mrs. Wendy Dennis, my secretary, has generously typed the whole manuscript in her own time and has been closely involved in the production of this report for nearly as long as my long-suffering wife and family. My wife served as official photographer on all campaigns, taking on too, as we all did, many cat-

aloguing and other chores. The University of Newcastle upon Tyne made a darkroom available from 1965, and from 1978, within the Department of Archaeology, a large work-room.

The excavation accounted for fifty-six weeks in the field. The total cost, including fares from Newcastle, accommodation, subsistence, and small honoraria in the field for the two co-directors (other staff simply received expenses), was about \$96,000. Sums allocated since 1969 for work in Istanbul or Newcastle have been less than \$65,000. Expenditure by Dumbarton Oaks has thus amounted to about \$160,000. Copies of the archaeological record and administrative details will be lodged at Dumbarton Oaks and the Istanbul Archaeological Museum.

Particular thanks go of course to all those who have over the years laboured in their own time to produce either text or illustrations, especially Margaret Gill, Elizabeth Harrison, John Hayes, and Gordon Lawson. Leave of absence was granted annually by Northumberland County Council to Mr. Lawson, and by the Laing Art Gallery of Newcastle upon Tyne to Dr. Gill. I must also thank Mr. Robert Brown at the Press for the care, patience, and understanding of his editorial work.

Finally, we had a rich site, which in the short time at our disposal we worked for all it was worth. It is presented here as succinctly as possible, with the minimum of discussion, for a full treatment would have even further delayed publication. Much has inevitably been omitted and much might be improved; but, as Gertrude Bell long ago sensibly remarked, "Half a loaf, in matters archaeological, is very much better than no bread, and more work is wasted by being stored up in notebooks until it can be perfected than ever finds its way into the light of day."¹

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SUMMARY

R. M. HARRISON

IN 1960, BULLDOZING operations at Saraçhane uncovered a number of sculptured marble fragments attributable to the 'lost' church of St. Polyeuktos, which was known to have been built by Anicia Juliana in 524-7. These fragments indicated that the church was built on a grand scale and that its decoration was of the highest technical quality and very surprising form. There was thus the opportunity to examine a major building precisely dated to the critical period immediately before the building programme of Justinian, and excavations were carried out annually from 1964 to 1969 under the joint auspices of Dumbarton Oaks and the Archaeological Museum of Istanbul. Short reports on each season were published in *DOP*, *IAMY*, and elsewhere. This is the full and final report on these excavations. The first part of this volume consists of an introduction and descriptions of the excavated structures and the stratigraphy; in the second part, various categories of material are presented, first those directly concerning the church (architectural sculpture, marble revetment and inlays, mosaics, painted plaster, window glass, and brick-stamps), then those documenting the history of the site (small finds, coins, human skeletal material and animal bones, and molluscs); in the third part there is a discussion of the church of St. Polyeuktos. Pottery and glass-vessels are the subject of Volume II.

Chapter 1 contains various introductory sections, one of which sets out the relevant testimonia; chief of these is the long poem preserved as *Anthologia Palatina* I, 10, which adorned the church and of which seven substantial fragments have been found. Lines 1-41 were inscribed around the nave on an elaborate entablature consisting of arches and niches decorated with lattice-work, an extraordinarily naturalistic grapevine, and peacocks with tails outspread and bodies in the round.

Work was carried out side by side with the construction by municipal engineers of a major underpass, from which some evidence was salvaged for the lay-out of the area in the fourth or fifth century, for the construction of St. Polyeuktos (whose structure was clipped by

the underpass) in the sixth, and for a fifteenth-century bath-house (the Ibrahim Paşa Hamamı). An account of this is contained in chapter 2 as well as a full description of the structural remains of the main site. Here too are included accounts of a twelfth-century cemetery that overlay the western part of the main site and of the principal Turkish pits, which penetrated the whole of it. Remains of walls antedating the church were noted in the atrium, where they were on the same alignment as the church, and beneath its main body where they diverged from it, but too little survived for any useful interpretation. Again, little remained of Turkish walls, which had for the most part been removed in successive levellings, leaving only rubbish-pits and wells and a few, mostly Early Ottoman foundations (including those of a small bath-house and perhaps the Karagöz Camii).

The church itself survived only in its foundations, but these consisted of massive substructures, whose passages and chambers were choked with debris, including sculpture, mosaic, and inlay, from the church's collapse. The foundations consisted of a massive square (52 m) platform with western narthex and eastern apse appended, elevated some 5 metres above ancient ground level and approached by a monumental staircase from the atrium at the western end. There was a square crypt beneath the sanctuary and at the exact centre of the building an elliptical foundation for what was evidently the ambo. Massive longitudinal walls (ca. 8 m thick) provided a division into nave and aisles, and there were chambers of some sort in the north-east and south-east corners of the building. Nothing survived above floor-level. To the west, a few slabs of the atrium pavement (at ground level) did survive, and to the north of the atrium was a large substructure which was probably a baptistery, which was in the twelfth century converted into a cistern.

The stratigraphy is presented in chapter 3, in the form of a tabulated list of 'levels' (a better term might have been 'contexts'), supported by section-drawings.

SUMMARY

The table includes for each level as appropriate the date suggested by the pottery, the date of the latest of any coins, and an indication of the presence or absence of mosaic, inlay, painted plaster, and window glass. This is followed by an interpretative account of the site's chronological development derived from the historical and structural evidence and the stratification and finds. Church, atrium, and complex north of the atrium are shown to be of one period (i.e., 524–7), and there is little evidence for structural modification or repair. Activity of a sort (large deposits of dumped material in the north-aisle substructures) is attested in the seventh century, and there is similar evidence (deposits in the narthex-substructure) for the eighth, the latter producing a remarkably large number of coins. There is literary evidence (*De caer.* and the scholiast to *Anth. Pal.* i, 10) that the church could still be visited in the tenth century. In the eleventh there was squatter occupation in the narthex-substructure and in the atrium, which was quarried in the twelfth when first the substructures north of the atrium were converted into a grand cistern and then the open area was used as a graveyard.

The church is believed to have collapsed between ca. 1190 (coins of Isaac II sealed by the destruction-layer) and ca. 1204 (when structural marbles were removed to Venice and elsewhere). Doubtless the site continued to be quarried for marble and brick under the Latin Occupation, but evidence dwindles sharply, and the site was presumably quite derelict during the Palaeologan period.

It was reoccupied in the latter part of the fifteenth century when large Turkish houses (*konaklar*) and a mosque (the Karagöz Camii) were constructed; the wealth of the new residents is attested by the very high quality of the pottery (including Iznik, and Italian and Chinese imports) recovered from rubbish pits. The site was occupied without a break until the present century, although structural remains later than the seventeenth have largely disappeared.

Chapter 5, the first of the catalogues, presents the architectural carving, divided into twenty-three categories by form, function, or, in the case of the disiecta membra, fate. Material ranges from the richly decorated (e.g., cornices and pier-capitals) to the plain (e.g., window-frames and thresholds) and includes fragments of the great inscribed entablature and a set of marble icons. Virtually all this marble is Proconnesian, and the problem has been to classify and to deal as succinctly as possible with over thirteen thousand often very small fragments.

Marble revetment and inlays, in coloured marbles, amethyst, agate, and glass, are described in chapter 6; a small quantity of pavement-mosaic and a much larger quantity of wall- and vault-mosaic, both evidently of the sixth century, the latter figured, in chapter 7; and Byzantine and Turkish painted plaster in chapter 8. Window glass, treated in chapter 9, was remarkably scarce, considering the very large number of window-frames attributable to the church. Chapter 10 is a catalogue and discussion of 1,217 stamped bricks, which represent 128 different stamps of six basic categories and which allow some general conclusions to be drawn both about manufacture and about dating. The catalogue of small finds, the often illuminating bric-à-brac of Byzantine and Turkish urban settlement, follows as chapter 11, and the catalogue of coins as chapter 12. Reports on skeletal material representing some three hundred individuals from a late twelfth- (and early thirteenth-?) century cemetery (chapter 13) and on animal bones and molluscs from both Byzantine and Turkish contexts (chapter 14) complete the series of catalogues.

The first volume ends with a discussion (chapter 15) of the church, which was the excavation's principal objective. There are sections on the topography, where it is argued that the Mesê ran to the south of the church rather than to the north of it; the architecture, where the evidence points to a central dome over the eastern part of the nave (perhaps like a more elaborate version of St. Eirene) and to the building north of the atrium having been a baptistery; the building materials and methods, where J. B. Ward-Perkins's observations on the Great Palace are generally confirmed; the sculpture, where the high technical calibre and extraordinary range of classical and Sassanian motifs are discussed and some remarks are made on Early Byzantine portraiture; and the historical context, where the church is seen as a monument of dynastic and imperial propaganda. The church appears to have been deliberately modelled, in overall dimensions and decorative details, on biblical descriptions of the Temple of Solomon.

The second volume is devoted to the detailed study of pottery and glass. The quantity of material processed was enormous (perhaps 400,000 sherds), and it is presented in three main parts: (1) late Roman and Byzantine pottery (including amphorae and lamps), (2) Turkish pottery (including Chinese and other imports and clay tobacco-pipes), and (3) Late Roman, Byzantine, and Turkish glass (including both vessels and lamps).

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LIST OF ABBREVIATIONS

BIBLIOGRAPHICAL ABBREVIATIONS

<i>Arch. Anz.</i>	<i>Archäologischer Anzeiger</i>
AJA	<i>American Journal of Archaeology</i>
AMY	<i>Ayasofya Müze Yıllığı</i>
<i>Anth. Pal.</i>	<i>Anthologia Palatina</i>
<i>Arch. Eph.</i>	<i>Ἀρχαιολογικὴ Ἐφημερίς</i>
AS	<i>Anatolian Studies</i>
BZ	<i>Byzantinische Zeitschrift</i>
CA	<i>Cahiers Archéologiques</i>
Corinth	G. R. Davidson, <i>Corinth Volume XII: The Minor Objects</i> (1952)
DACL	F. Cabrol and H. Leclercq (edd.), <i>Dictionnaire d'Archéologie Chrétienne et de Liturgie</i> (15 vols., 1907-53)
<i>De caer.</i>	Constantine Porphyrogenitus, <i>De caerimoniis</i>
DOP	<i>Dumbarton Oaks Papers</i>
<i>Great Palace 1</i>	G. Brett, G. Martiny, R.B.K. Stevenson, <i>The Great Palace of the Byzantine Emperors, First Report</i> (Oxford, 1947)
<i>Great Palace 2</i>	D. Talbot Rice, ed., <i>The Great Palace of the Byzantine Emperors. Second Report</i> (Edinburgh, 1958)
IAMY	<i>Istanbul Arkeoloji Müzeler Yıllığı</i>
IM	<i>Istanbuler Mitteilungen</i>
Janin, <i>Constantinople</i>	R. Janin, <i>Constantinople Byzantine</i> (2nd edition, Paris, 1964)
JÖB	<i>Jahrbuch der Österreichischen Byzantinistik</i>
Mathews, <i>Early Churches</i>	T. F. Mathews, <i>The Early Churches of Constantinople. Architecture and Liturgy</i> (University Park, Pennsylvania, 1971)
Müller-Wiener, <i>Bildlexikon</i>	W. Müller-Wiener, <i>Bildlexikon zur Topographie Istanbuls</i> (Tübingen, 1977)
<i>Patria Const.</i>	<i>Patria Constantinopoleōs</i>
PBA	<i>Proceedings of the British Academy</i>
PG	<i>Patrologia Graeca</i>
PL	<i>Patrologia Latina</i>
RA	<i>Revue Archéologique</i>
REB	<i>Revue des Etudes Byzantines</i>
TAD	<i>Türk Arkeoloji Dergisi</i>
TM	<i>Teheraner Mitteilungen</i>
Weitzmann, AOS	K. Weitzmann, ed., <i>Age of Spirituality</i> (New York, 1979)

LIST OF ABBREVIATIONS

CATALOGUING ABBREVIATIONS

F	Site-inventory of small finds
M	Site-inventory of marble carving
Mus	Istanbul Archaeological Museum accession number
UP	Site-inventory of marbles from underpass

Chapter One

DISCOVERY AND BACKGROUND

R. M. HARRISON

Discovery of the Church and Circumstances of Excavation

IN APRIL and May 1960 grading operations at Saraçhane uncovered a large number of richly carved architectural blocks. Two carried parts of an inscription, and these few words were recognized by I. Ševčenko as belonging to the seventy-six-line epigram on the church of the martyr Polyeuktos, which is preserved as *Anthologia Palatina* I, 10.¹ The church was built by Anicia Juliana, probably in the years 524-7, and was evidently, to judge from the architectural carving, the epigram, and the few historical references to it, an ambitious affair. The evidence was collected and discussed in 1961 in an important article by C. Mango and I. Ševčenko.² It was clear from the sources that the church had lain somewhere between the Forum Tauri (Beyazit) and the church of the Holy Apostles (Fatih), and Saraçhane exactly fitted this requirement (fig. A); there was little doubt that the site of Anicia Juliana's church had been discovered. In 1963 the sculpture, remarkable both for its technical quality and for the extraordinary range of its motifs, was discussed by A. Grabar.³

Although the likely importance of an investigation of a major Constantinopolitan monument securely dated to the critical decade before Justinian's great building programme was appreciated, the area concerned, in the south-west angle of the Şehzadebaşı Caddesi-Atatürk Bulvarı intersection and immediately west of the new City Hall (fig. A, chapter 2, and pls. 14, 15), was meanwhile laid out as public gardens. The opportunity for investigation only came in 1964, when the conversion of the intersection into an underpass meant that the eastern part of the site would be dug mechanically for construction of the tunnel approach and that the gardens would be disfigured by a temporary road laid across them to carry diverted traffic. An agreement was reached with the Turkish Department of Antiquities for excavations to be carried out jointly by Dumbarton Oaks and the Istanbul Archaeological

Museum, under the direction of R. M. Harrison and N. Firatlı, and excavation began on 3 August 1964.

The underpass was scheduled for completion in 1966, and the permit was for three seasons in the first instance. The extent, depth, and complexity of the site, however, and the fragmentary nature of much of the evidence, meant that much longer was required. The underpass was indeed completed in 1966, but excavation was permitted for three more seasons, being brought formally to a close on 23 July 1969. Excavation had been carried out for a total of fifty-six weeks in six campaigns; the supervisory staff, including Turkish assistants, ranged from five to twelve, the labour force from fifteen in 1964 to a maximum of sixty-seven in 1967. The excavation's progress and development can be followed in the series of published annual reports.⁴

Under rescue conditions we worked fast (often far too fast for comfort), and it was decided at the outset that our duty was to deal as scrupulously with the supervening Ottoman levels as with the Byzantine. The sheer quantity of material was prodigious, and processing and storage were perennial problems. One hut was constructed in 1964 and a second in 1965. In 1967-8 a subterranean depot was constructed within the substructures of the church's north aisle, which now houses the mosaics, painted plaster, glass, stamped bricks, and the bulk of the pottery and carved marble; coins, small finds, and selected items of pottery and marble were transferred to the Archaeological Museum.

There are plans to devote a room in the new wing of the Archaeological Museum to the display of a selection of material from Saraçhane, and plans too to lay out the site as an archaeological park; for the latter project, detailed landscape-drawings were prepared by Mr. R. Griswold and accepted by the municipal authorities in 1968.⁵

THE EXCAVATION

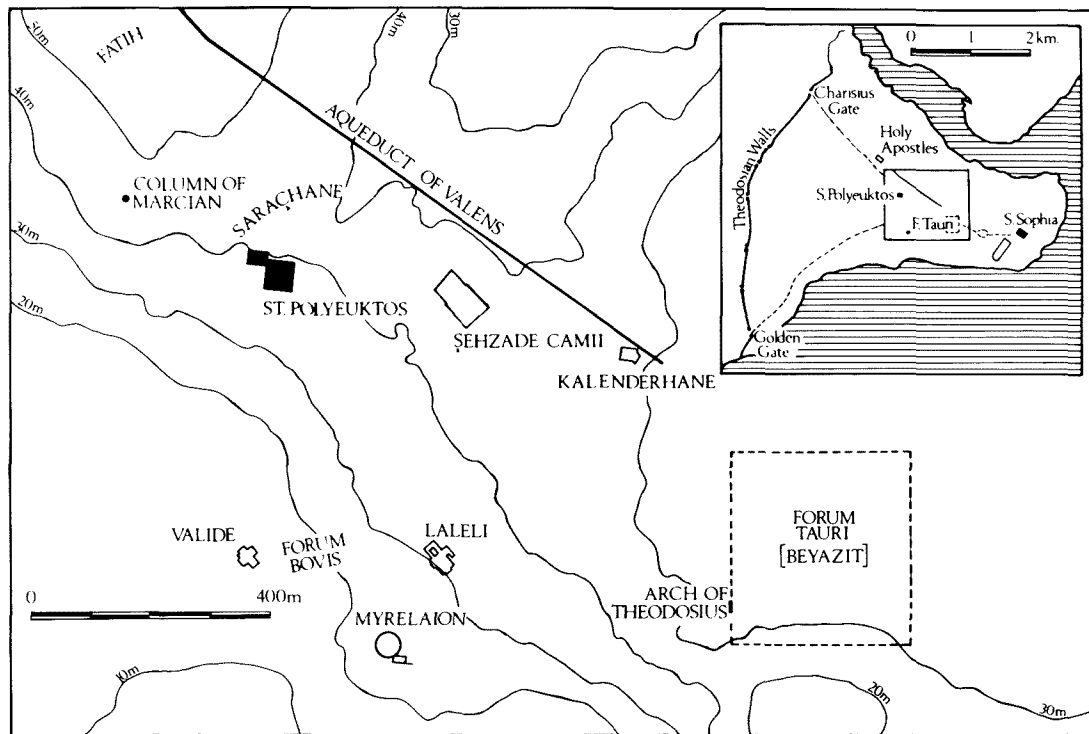


FIGURE A. Map of Central Constantinople

Historical Considerations

FOR A BRIEF account of Anicia Juliana, it would be hard to improve upon a paragraph in the article by Mango and Ševčenko:

The life of Anicia Juliana, who is now remembered chiefly for the Vienna manuscript of Dioscorides which she commissioned, is known to us in some detail. She was born ca. A.D. 463 to Flavius Anicius Olybrius (cos. 464, Emperor of the West in 472) and Placidia the younger, daughter of Valentinian III. In 479 she was offered in marriage to Theodoric the Amal, but this match did not take place. Soon thereafter she was married to Flavius Areobindus Dagalaifus (cos. 506) by whom she had only one son, Flavius Anicius Olybrius Junior who was consul in the East as a very young boy in 491. The latter had at least two daughters and presumably no son. Areobindus was still alive in 512 when the crown was pressed upon him in the course of a popular riot against the Emperor Anastasius, an honour which he avoided by flight. Juliana died in ca. 527/8.⁶

The epigram⁷ mentions her son and granddaughters, but not her husband Areobindus, who was thus pre-

sumably already dead and who is last attested in 512. The church was therefore constructed after 512 and before her death in ca. 527/8. A scholion on the epigram says that the church was built in three years, and Mango and Ševčenko proposed the triennium 524-7, a suggestion that the excavation has tended to confirm. The epigram states that it replaced an earlier, small church dedicated to St. Polyeuktos by Empress Eudocia, wife of Theodosius II (408-50);⁸ Gregory of Tours remarks that it was adjacent to her palace,⁹ and a recently discovered description of Constantinople, apparently of the eleventh century, mentions that it housed the relic of St. Polyeuktos' head.¹⁰ By the fourteenth century the relic had been transferred to a chapel in the church of the Holy Apostles, where it was observed by Russian pilgrims.¹¹

Polyeuktos, a Roman soldier in the garrison-town of Melitene (modern Malatya) on the river Euphrates, suffered martyrdom there probably on 9 January 250.¹² Churches dedicated to him are recorded in Melitene, Jerusalem, and Ravenna, in addition to at least two in Constantinople, for there was also a church of St. Polyeuktos *en tois Biglention*, a district somewhat to the

east of Saraçhane.¹³ When his relics were transferred from Melitene to Constantinople is not known.

After Anicia Juliana's death, it is recorded that her son Olybrius was somehow implicated in the Nika riots of 532 and was exiled by Justinian, who confiscated his property (presumably including the palace and church); some years later he was allowed to return, and his property was restored to him.¹⁴ Nothing further is heard of this ancient and illustrious family, which must be supposed to have died out. Although there are references to the church in the tenth and eleventh centu-

ries, nothing is known of its upkeep, administration, and status. That it was occasionally accessible in this period is implied by the *Book of the Ceremonies*, the scholiast of *Palatinus* 23, and the eleventh-century "description";¹⁵ the fact that excavations uncovered no appreciable modifications or additions to its fabric or decoration but did uncover deep deposits of dumped seventh- to tenth-century material in the undercroft does suggest that the church was kept on a "care and maintenance" basis only.

Topographical Considerations

SARAÇHANE lies approximately at the centre of the Byzantine city, roughly half-way between the promontory (Saray Burnu) and the Land Walls, and half-way between the Golden Horn and the Sea of Marmara (fig. A). The name, meaning "Saddlery Market," denotes a district that is now mainly open ground, extending west and south-west of the Şehzade Camii and south of the Aqueduct of Valens. Since 1940 when the Atatürk Bulvarı was constructed, there has been a major crossing here with the Şehzadebaşı Caddesi, which runs east-west along the ridge.

In terms of the city's growth, Saraçhane lay a long way outside the walls both of the Greek colony and of the enlarged Roman city. In the Roman period there was an extensive cemetery north-west of Beyazıt,¹⁶ presumably following a road on the high ground, and it was no surprise therefore to find Roman gravestones and a sarcophagus at Saraçhane. When Constantine's city incorporated Saraçhane in 330, the area was fairly quickly settled. The Aqueduct of Valens was constructed in 368, the Column of Marcian in 450-2, and the extensive foundations plotted in 1965 in the underpass excavation are almost certainly of this general pe-

riod. Anicia Juliana's church is on a rather different alignment from that of the Aqueduct and the underpass foundations, but, as will be seen from foundations in the area of the church's atrium, it was not the first building on this site with this alignment.

The Şehzadebaşı Caddesi follows the present ridge, the ground falling away northwards to the Aqueduct of Valens and southwards towards Aksaray. The site of the church is on the southern slope, and that the ground sloped similarly in antiquity is shown by the fact that the church's principal drains ran from north to south. The church was evidently an addition to Anicia Juliana's palace, which may have occupied the higher ground immediately north (or north-west) of the church.

A major topographical problem is that of the exact line of the northern branch of the Mesê, the arterial street which ran from the Forum Tauri (Beyazıt), past St. Polyeuktos, to the church of the Holy Apostles (Fatih), and beyond. This is discussed below (chapter 15) in the light of the excavations; it is probable that the Mesê ran close to St. Polyeuktos, on the church's south side.

Testimonia

IT WILL BE convenient to present here the documentary sources referring to the church, of which the epigram in the *Anthologia Palatina* takes pride of place.

(a) *Anthologia Palatina* I, 10 (ed. H. Stadtmüller, *Anthologia Graeca* I, 1894).

This poem was originally carved in the church itself, lines 1-41 in the entablature of the nave, lines 42-76 outside the narthex. Seven substantial pieces of the entablature were found at Saraçhane, and the parts of the epigram which have thus survived in their *editio princeps* are indicated in the following text by capital letters.

Εὐδοκίη μὲν ἄνασσα, θεὸν σπεύδουσα γεραίρειν,
 πρώτη νηὸν ἔτευξε θεοφραδέος Πολυεύκτου·
 ἀλλ' οὐ τοῖον ἔτευξε καὶ οὐ τόσον· οὐ τι φειδοί,
 οὐ κτεάτων χατέουσα—τίνος βασιλεία χατίζει;—
 5 ἀλλ' ὥς θυμὸν ἔχουσα θεοπρόπον, ὅττι γενέθλην
 καλλεΐψει δεδαυῖαν ἀμείνονα κόσμον ὀπάζειν.
 ἔνθεν Ἰουλιανή, ζαθέων ἀμάρυγμα τοκῆων,
 τέτρατον ἐκ κείνων βασιλῆϊον αἶμα λαχοῦσα,
 ἐλπίδας ΟΥΚ ΕΨΕΥΣΕΝ ΑΡΙΣΤΩΔΙΝΟΣ
 ΑΝΑΣΣΗΣ·
 10 ἀλλὰ μιν ἐκ βαιοῖο μέγαν καὶ τοῖον ἐγείρει,
 κῦδος ἀεξήσασα πολυσκήπτρων γενετῆρων·
 πάντα γὰρ ὅσα τέλεσεν ὑπέρτερα τεῦξε τοκῆων,
 ὀρθὴν πίστιν ἔχουσα φιλοχρίστοιο μενοινῆς.
 τίς γὰρ Ἰουλιανὴν οὐκ ἔκλυεν, ὅττι καὶ αὐτοῦς
 15 εὐκαμάτοις ἔργοισιν ἐοὺς φαίδρυνε τοκῆΑΣ,
 ΕΥΣΕΒΙῆς ἀλέγουσα; μόνη δ' ἰδρῶτι δικαίῳ
 ἄξιον οἶκον ἔτευξεν ἀειζῶφ Πολυεύκτῳ.
 καὶ γὰρ αἰεὶ δεδάηκεν ἀμεμφέα δῶρα κομίζειν
 πᾶσιν ἀεθλητῆρσιν ἐπουρανίου βασιλῆος.
 20 πᾶσα χθὼν βοᾷ, πᾶσα πτόλις, ὅττι τοκῆας
 παιδροτέρους ποίησεν ἀρειοτέροισιν ἐπ' ἔργους.
 ποῦ γὰρ Ἰουλιανὴν ἀγίοις οὐκ ἔστιν ιδέσθαι
 νηὸν ἀναστήσασαν ἀγακλέα; ποῦ σέο μούνης
 εὐσεβέων οὐκ ἔστιν ιδεῖν σημήϊα χειρῶν;
 25 ποῖος δ' ἔπλετο χώρος, ὃς οὐ μάθε σείΟ ΜΕΝΟΙΝῆν
 εὐσεβίης πλήθουσαν; ὅλης χθονὸς ἐνναετῆρες
 σοΥΣ ΚΑΜΑΤΟΥΣ ΜΕΛΠΟΥσιν ἀειμνήστους
 γεγαῶτας.
 ἔργα γὰρ εὐσεβίης οὐ κρύπτεται· οὐ γὰρ ἀέθλους
 λήθη ἀποσβέννυσιν ἀριστοπόνων ἀρετῶν.
 30 ὅσα δὲ σὴ παλάμη θεΟΠΕΙΘΕΑ ΔΩΜΑΤΑ ΤΕΥΧΕΙ
 ΟΥΔ' ΑΥΤΗ ΔΕΔΑΗΚΑΣ· ΑΜΕΤΡῆτους γάρ, ὦτω,
 ΜΟΥΝΗ ΣΥ ΕΥΜΠΑΣΑν ἀνὰ χθόνα δείμασ νηοῦς,
 οὐρανίου θεράποντας αἰεὶ τρομέουσα θεοῖο.
 ἵχνεσι δ' εὐκαμάτοισιν ἐφespoμένη γενετῆρων
 35 πᾶσιν αἰεὶ ζώουσαν ἦν τεκτῆνατο φύτλην,
 εὐσεβίης ξύμπασαν αἰεὶ πατέουσα πορεΐην.
 τοῦνεκά μιν θεράποντες ἐπουρανίου βασιλῆος,
 ὅσοις δῶρα δίδωσιν, ὅσοις δωμήσατο νηοῦς,
 προφρονέως ἐρύεσθε σὺν νύϊ τοιό τε κούραις·
 40 μίμνοι δ' ἄσπετον εὐχος ἀριστοπόνου γενέθλης,
 εἰσόκεν ἥλιος πυριλαμπέα δίφρον ἐλαύνει.
 ποῖος Ἰουλιανῆς χορὸς ἄρκιός ἐστιν ἀέθλους,
 ἢ μετὰ Κωνσταντίνον, ἥς κοσμήτορα Ῥώμης,
 καὶ μετὰ Θεοδοσίου παγχρύσειον ἱερὸν ὄμμα
 45 καὶ μετὰ τοσσατίων προγόνων βασιλῆϊδα ῥίζαν,
 ἄξιον ἧς γενεῆς καὶ ὑπέρτερον ἦνυσεν ἔργον
 εἰν ὀλίγοις ἐτέεσσι; χρόνον δ' ἐβίησατο μούνη,
 καὶ σοφίην παρέλασεν ἀειδομένου Σολομῶνος,
 νηὸν ἀναστήσασα θεηδόχον, οὐ μέγας αἰῶν

οὐ δύναται μέλψαι χαρίτων πολυδαίδαλον αἶγλην·
 οἷος μὲν προβέβηκε βαθυγρίζοισι θεμέθλοις,
 νέρθεν ἀναθρώσκων καὶ αἰθέρος ἄστρα διώκων·
 οἷος δ' ἀντολῆς μηκύνεται ἐς δύσιν ἔρπων,
 ἀρρήτοις Φαέθοντος ὑπαστράπτων ἀμαρυγαῖς
 55 τῇ καὶ τῇ πλευρῇσι· μέσης δ' ἐκάτερθε πορεΐης
 κίονες ἀρρήκτοις ἐπὶ κίοσιν ἐστηῶτες
 χρυσορόφου ἀκτῖνας ἀερτάζουσι καλύπτρης·
 κόλποι δ' ἀμφοτέρωθεν ἐπ' ἀψίδεσσι χυθέντες
 φέγγος ἀειδίνητον ἐμαιοῦσαντο σελήνης·
 60 τοῖχοι δ' ἀντιπέρηθεν ἀμετρήτοισι κελεύθοις
 θεσπεσίους λειμῶνας ἀνεζώσαντο μετάλλων,
 οὓς φύσις ἀνθήσασα μέσοις ἐνὶ βένθεσι πέτρης
 ἀγλαίην ἐκλεπτε, θεοῦ δ' ἐφύλασσε μελάθροις
 δῶρον Ἰουλιανῆς, ἵνα θέσκελα ἔργα τελέσῃ,
 65 ἀχράντοις κραδίης ὑπὸ νεύμασι ταῦτα καμοῦσα.
 τίς δὲ φέρων θοὸν ἵχνος ἐπὶ ζεφυρηίδας αὔρας
 ὕμνοπόλος σοφίης, ἐκατὸν βλεφάροισι πεποιθώς,
 τοξεύσει ἐκάτερθε πολύτροπα δῆνεα τέχνης,
 οἶκον ἰδὼν λάμποντα, περιδρομον, ἄλλον ἐπ' ἄλλῳ,
 70 ἔνθ' ἵνα καὶ γραφίδων ἱερῶν ὑπὲρ ἄντυγος αὐλῆς
 ἔστιν ιδεῖν μέγα θαῦμα, πολύφρονα Κωνσταντίνον,
 πῶς προφυγῶν εἰδῶλα θεημάχον ἔσβεσε λύσσαν,
 καὶ Τριάδος φάος εὔρεν ἐν ὕδασι γυῖα καθήρας.
 τοῖον Ἰουλιανή, μετὰ μυρίον ἐσμὸν ἀέθλων,
 75 ἦνυσεν τοῦτον ἀέθλον ὑπὲρ ψυχῆς γενετῆρων
 καὶ σφετέρου βιότοιο καὶ ἐσσομένων καὶ ἐόντων.

The empress Eudocia, in her eagerness to honour God, was the first to build here a temple to the divinely inspired Polyeuktos; but she did not make it as fine or as large as this, not from any restraint or lack of resources—for what can a Queen lack?—(5) but because she had a divine premonition that she would leave a family which would know well how to provide a better embellishment. From this stock Juliana, bright light of blessed parents, sharing their royal blood in the fourth generation, did not disappoint the hopes of that Queen, who was mother of the finest children, (10) but raised this building from its small original to its present size and form, increasing the glory of her many-sceptred ancestors. All that she built she made more excellent than her forebears, having the true faith of a Christ-loving purpose. For who has not heard of Juliana, that, heeding piety, she glorified even her parents by her finely laboured works? She alone by her righteous sweat has built a house worthy of the immortal Polyeuktos. For she had always learnt to provide blameless gifts to all athletes of the heavenly King. (20) The whole earth, every city, cries out that she has made

her parents more glorious by these better works of hers. For where is it not possible to see that Juliana has raised up a fine temple to the saints? Where is it not possible to see the signs of the pious hands of you alone? (25) What place is there which has not learnt that your mind is full of piety? The inhabitants of the whole world sing your works, which are always remembered. For the works of piety are not hidden; oblivion does not wipe out the labours of industrious virtue. (30) Even you do not know how many houses dedicated to God your hand has made; for you alone, I think, have built innumerable temples throughout the world, always revering the servants of the heavenly God. Following on all the well-founded footsteps of her parents, (35) she gave birth to a family which is immortal, always treading the full path of piety. Wherefore may the servants of the heavenly King, to whomsoever she gave gifts and to whomsoever she built temples, protect her readily with her son and his daughters. (40) And may the unutterable glory of the most industrious family survive as long as the Sun drives his fiery chariot.

(42) What choir is sufficient to sing the work of Juliana, who, after Constantine, embellisher of his Rome, after the holy golden light of Theodosius, (45) and after the royal descent from so many forebears, accomplished in a few years a work worthy of her family, and more than worthy? She alone has conquered time and surpassed the wisdom of celebrated Solomon, raising a temple to receive God, the richly wrought and graceful splendour of which the ages cannot celebrate. (51) How it rises from deep-rooted foundations, springing up from below and pursuing the stars of heaven, and how too it is extended from east to west, glittering beyond description with the brightness of the sun (55) on both its sides! On either side of the central nave, columns standing upon sturdy columns support the rays of a golden roof. On both sides recesses hollowed out in arches have given birth to the ever-revolving light of the moon. (60) The walls, opposite each other, have recalled to life in measureless paths marvellous meadows of precious materials, whose brightness nature, flowering in the deep depths of the rock, has concealed and guarded for the house of God, to be the gift of Juliana, so that she might accomplish divine works, (65) labouring at these things in the immaculate promptings of her heart. What singer of wisdom, moving swiftly on the breath of the zephyr and armed with a hundred eyes, will be able to take in on each side the highly elaborate productions of art,

seeing the shining encircling house, one storey set upon the other? (70) There, it is possible to see over the arch of the court a great marvel of sacred depiction, the wise Constantine, how escaping the idols he overcame the god-fighting fury and found the light of the Trinity, by purifying his limbs in water. Such is the labour that Juliana, after a countless swarm of labours, accomplished for the souls of her parents, and for her own life, and for the lives of those who are to come and those that already are.

As regards the scholia, it will be convenient to quote here a passage from the article on the church by Mango and Ševčenko:

The position of the inscription in the church is indicated by marginal scholia in the best edition of the *Anthology*, *Palatinus* 23. Opposite verses 30-32 is written: "These things are inscribed all round, inside the *naos*" (ταῦτα μὲν ἐν τῷ ναῷ ἐνδοθεν κύκλῳ περιγράφονται). At the end of verse 41 is an asterisk, next to which is written: "At the entrance of the same church, outside the narthex, in the direction of the arch (ἐν τῇ εἰσόδῳ τοῦ αὐτοῦ ναοῦ, ἔξωθεν τοῦ νάρθηκος πρὸς τὴν ἀψίδα). Further asterisks are placed between verses 46-47, 50-51, 56-57, and 61-62. Opposite lines 59-61 is written: "There are four slabs on which these things are inscribed, five or six verses on each" (τέσσαρες εἰσὶ πίνακες ἐν ᾧ [sic] ταῦτα περιγράφονται ἀνὰ στίχους πέντε ἢ καὶ ἕξ). Finally, opposite verses 63-66 is written: "This is the last slab, on the right-hand side of the entrance, on which these things are inscribed" (ἔσχατός ἐστι πίναξ ὁ πρὸς τοῖς δεξιῶν μέρεσι τῆς εἰσόδου ἐν ᾧ ἐπιγράφεται ταῦτα). It follows that the entire epigram was carved in the church. Lines 1-41 appear to have been within the nave; lines 42-61 outside the narthex, on four slabs distributed as follows: 42-46, 47-50, 51-56, 57-61; lines 62-76 on another slab to the right of the entrance.

Other scholia state that the church was built in three years (ἐν τρισὶν ἔτεσι συνετέλεσθε ἅπαν ἔργον τοῦ ναοῦ) and that "All these things (i.e., verses) remain today in excellent condition(?) after five hundred years" (μένουσιν ἄριστε [sic] πάντα μέχρι τῆς σήμερον ἔτεσι πεντακοσίοις).

The architectural implications of the poem and its scholia are discussed in chapter 15 below. It may simply be remarked here that the poem falls into two distinct parts, first the section within the church for which provision must have been made during the church's construction, and second the section that was written on

slabs outside the narthex. The first glorifies Anicia Juliana and her maternal ancestry, mentions the church only in very general terms, and concludes with a prayer for the survival of the family; the second begins with a mention of Constantine the Great, contains a fairly detailed account of the church's architectural form and decoration, and concludes with a reference to the past, present, and future of the family. It seems probable that the poem was not only inscribed but also composed in two distinct stages, the first during construction of the church, the second after its completion and decoration.

(b) Procopius, *De aedificiis* (ed. H. B. Dewing) I, ii, 13. Ἐκκλησίᾳ δὲ τῇ μεγάλῃ ὁμορον οὖσαν καὶ συγκαταφλεχθεῖσαν αὐτῇ πρότερον τὴν τῆς Εἰρήνης ἐπώνυμον Ἰουστινιανὸς βασιλεὺς ὑπερμεγέθη ἐδέϊματο, ἱερῶν τῶν ἐν Βυζαντίῳ σχεδὸν τι ἀπάντων, μετὰ γε τῆς Σοφίας τὸν νεῶν, οὐδενὸς δεύτερον.

The church called after Eirene, which was next to the Great Church and had been burned down together with it, the Emperor Justinian rebuilt on a very large scale, so that, of practically all the churches in Byzantium except that of Sophia, it was second to none.

The syntax is curious, and the force of the qualification *σχεδὸν τι* (practically, approximately, more or less) is at first sight puzzling. It is, however, explicable as an oblique reference to an unnamed third church in the city, which was somewhat larger than St. Eirene. This can hardly be other than St. Polyeuktos, about which Procopius would be understandably reticent.

(c) Gregory of Tours, *De gloria martyrum* PL LXXI, cols. 793-5.

Apud Constantinopolim vero magno cultu Polioctus martyr colitur, pro eo praecipue quod cum magnis virtutibus polleat, in perjuris tamen praesens ultor existit. Nam quicumque, ut assolet, occultum scelus admiserit, et data suspicione ad hoc perductus fuerit templum, aut statim quod admisit virtute Martyris perterritus confitetur, aut si perjuraverit, protinus ultione divina percellitur. Hujus basilicae cameram Juliana quaedam urbis illius matrona auro purissimo textit hoc modo. Cum ad imperatorem Justinianum fama facultatis ejus multis narrantibus pervenisset, ad occursum illius properare celerius non tardavit, dicens: Latere te non puto, o venerabilis mater, qualiter a specie auri thesauri publici sint exhausti, dum vos quietos esse volumus, dum patrias defensare studeamus, dum gentes nobis placamus, dum solatia diversorum dando conquirimus. Ergo quia tibi poten-

tia Majestatis divinae multum contulit auri, quaeso ut nobis manum porrigas, atque aliquid pecuniae commodes, ut scilicet cum tributorum publicorum fuerit summa delata, illico tibi quae commodaveris reformentur, ac in posterum, laudis tuae titulo praecurrente canatur urbem Constantinopolitanam a Juliana matrona fuisse pecuniis sublevatam. At illa intelligens imperatoris ingenium, sapienter obtegit quae Deo devoverat, dicens: Parvitas reddituum meorum tam de tributis, quam quod de fructibus speratur, per ipsas adhuc residet domos; si ergo gloria vestra recipiendi spatium tribuerit, cum collectum fuerit, conspectui vestro repraesentabitur. Cumque oculis propriis cuncta contemplati fueritis, quae placuerint et relinquetis, et auferetis. Erit mihi ratum quod voluntas cordis vestri censuerit. His ita delusus imperator verbis, ad palatium gaudens rediit, putans se hanc pecuniam jam in thesauris publicis retinere. At illa vocatis artificibus, quantum reperire auri in promptuariis potuit, tradidit occulte, dicens: Ite, et factis juxta mensuram tignorum tabulis, beati ex hoc Poliocti martyris cameram exornate, ne haec avari imperatoris manus attingat. Illi vero perfecta omnia quae matrona praeceperat, camerae affixerunt, texeruntque ex auro mundissimo. Quo opere explicito, vocat mulier imperatorem, dicens: Parvitas pecunio lae, quam conjungere potui, adest: veni ad contemplandum eam, et quod libuerit facito. Surrexit gavisus imperator de solio, nihil percepturus ex auro: pergit ad domum mulieris, putans se copiosos thesauros palatio deportare. Cui cum mulier occursum humiliter reddidisset, invitat in templum Martyris ad orationem; erat enim proximum domui ejus, et haec quae habere potuerat loco illi delegaverat sancto. Apprehensa autem imperator manu mulieris, eo quod esset senex, ingreditur aedem, prosternitur ad orationem. Qua expleta, ait mulier: Suspice, quaeso, cameram hujus aedis, gloriosissime Auguste, et scito quia paupertas mea in hoc opere continetur. Tu vero quod volueris exinde facito, non adversor. Ille vero suspiciens atque admirans, erubuit, et ne pudor ejus manifestaretur, collaudans opus, et gratias agens, abscedere coepit. Sed ne rediret vacuus a munere, extractum mulier annulum a digito, cujus gemmam vola concluderat, qui non amplius auri pondus quam unius semiunciae continebat, obtulit ei, dicens: Accipe, imperator sacratissime, hoc munusculum de manu mea, quod supra pretium hujus auri valere censetur. Erat enim in eo lapis Neronianus mirae viriditatis ac splendoris: qui cum fuisset ostensus, omne aurum quasi in viriditatem visum est conver-

tisse a pulchritudine gemmae. At ille accipiens, et iterum gratias agens, et collaudans matronam, in palatium est regressus. Unde non est dubium, etiam in hac re Martyris hujus intercessisse virtutem, ne opes locis sanctis et pauperibus delegatae, in illius transferrentur dominationem, cujus non fuerant studio congregatae.

At Constantinople, however, the martyr Polyeuktos is worshipped with great veneration, for this fact especially, that, although he has great powers because of his many virtues, in cases of perjury, however, he is powerful as punisher. For whosoever has, as often happens, committed some secret wrong and has been led under suspicion to this church, either, terrified by the power of the martyr, he straightway confesses what he has committed, or, if he lies, is forthwith struck down by divine punishment. Juliana, a certain matron of that city, covered the roof of the basilica of the saint with pure gold in this fashion.

When stories of her great wealth reached the Emperor Justinian from many sources, he delayed not, but hurried to meet her, saying, "I do not think it escapes you, venerable mother, how the public treasures are drained of gold coin, while we wish you to enjoy peace, and labour to defend our native lands, and reconcile nations of ourselves, and seek to comfort the various peoples by our generosity. Therefore, because the power of divine majesty has conferred much gold upon you, I ask that you stretch forth your hand to us, and that you provide something of your money, on the clear understanding that, when the sum of public tribute has been declared, then instantly you may have some return from your gifts, and it may be publicly proclaimed in the glorious record of your life that the city of Constantinople was supported by the wealth of the lady Juliana."

But she, seeing through the Emperor's cleverness, wisely protected what she had vowed to God, saying, "What little income I have, as much from rents as what is hoped for from crops, is spread at the moment through my various residences. If therefore your majesty will grant me time to gather it in, it shall be presented to your inspection. And when you have gazed upon it with your own eyes, leave or take whatever you please. Whatever your heart decrees will be acceptable to me."

The Emperor, thus deluded by her words, returned rejoicing to his palace, thinking that he already had this money in the public treasury. But she,

having called her craftsmen, gave them secretly what gold she could find in her repositories, saying, "Go and, having made plates according to the measurements of the beams, decorate the roof of the (church of the) holy martyr Polyeuktos with this, lest it reach the hand of our avaricious Emperor." They prepared everything as the lady had instructed, and fitted the plates to the roof, and covered it with purest gold. When the work was done the woman called the Emperor, saying, "What pitiful small wealth I have put together is ready here; come and gaze on it and do what you please." The Emperor rose rejoicing from his throne, but he was not going to receive any of the gold. He drove to the woman's house, thinking that he would carry off abundant treasures to his palace. The lady received him humbly and invited him into the martyr's church to pray. For it was right next to her palace, and she had dedicated all the wealth she had acquired to that holy shrine.

The Emperor having taken the hand of the woman, for she was old, entered the church and knelt in prayer. When this was finished, the woman said, "Look up, I beseech you, at the roof of this church, most glorious Emperor, and know that my poor resources are contained in this work. You must now do what you want. I offer no opposition."

He therefore, looking up and marvelling, was ashamed, and, lest his shame be manifest, he praised the work and, thanking her, was beginning to leave. But, lest he return empty-handed from this enterprise, the woman drew a ring containing not more than one half an ounce of gold from her finger (she had been concealing the gem in the palm of her hand), and gave it to him, saying, "Accept, most sacred Emperor, this tiny gift from my hand, because it is deemed to be worth more than this gold." For there was in it an Emerald of wondrous greenness and splendour. When it was shown, all the gold seemed to have been turned green by the beauty of the gem.

And he received it and again gave thanks, and, praising the lady, he returned to his palace. Whence there is no doubt, that the virtue of the martyr interceded even in this matter, to prevent the transference of wealth which had been earmarked for holy places and for the poor, into the control of a man, by whose efforts it had not been acquired.

(d) *De Cerimoniis* (ed. A. Vogt, pp. 68 and 43-4; ed. Reiske, pp. 75-6 and 50): from the account of the imperial procession for Easter Mondays.

... καὶ ἀνελθὼν τὴν Μέσσην, διέρχεται διὰ τε τῶν Ἀρτοποιῶν καὶ τοῦ Ταύρου. Καταλαβὼν τὸν ναὸν τῆς παναγίας Θεοτόκου τῶν Διακονίσσης, ἐπιδίδωσιν ὁ βασιλεὺς τὸ λιτανίκιον, καὶ μέχρι τοῦ Φιλαδελφίου, διελθὼν, ἐκκλίνει τὸ δεξιὸν μέρος, καὶ ἔρχεται διὰ τε τῶν Ὀλυβρίου καὶ τῶν Κωνσταντιανῶν μέχρι τοῦ Ἁγίου Πολυεὐκτου. Ὑπαλλάξας δὲ καὶ κείσῃ κηρίον, καὶ λαβὼν ἕτερον κηρίον παρὰ τοῦ πραιποσίτου, διέρχεται τὴν Μέσσην μέχρι τῶν Ἁγίων Ἀποστόλων.

... and, following the Mesê, he proceeds by way of the Bakers' quarter and of the Forum Tauri. Reaching the church of the all-holy Mother of God of the Diaconissa, the Emperor hands over the processional candle, and, crossing the Philadelphion, he veers to the right and comes by way of the quarters of Olybrius and of Constantiniana to St. Polyeuktos. Changing his candle there, and taking another from the praepositus, he continues along the Mesê to the Holy Apostles.

Ὑποστροφὴ τῶν δεσποτῶν δείλης ἀπὸ τοὺς Ἁγίους Ἀποστόλους πρὸς τὸ παλάτιον.

Δοχὴ α', εἰς τοὺς Λέοντας . . .

Δοχὴ β', εἰς τὸν Ἅγιον Πολύευκτον. Δέχεται ἐκεῖσε ὁ δήμαρχος τῶν Βενέτων μετὰ τοῦ δήμου τοῦ Λευκοῦ, καὶ λέγουσιν οἱ κράκται· Καλῶς ἦλθεν ἡ ἐνθεὸς βασιλεία. Τὰ δὲ τῆς εὐφημίας ἄκτα ἄδονται παρὰ τε τῶν κρακτῶν καὶ τοῦ λαοῦ, καθὼς καὶ ἐν ταῖς λοιπαῖς δοχαῖς.

Δοχὴ γ', εἰς τὴν Ἁγίαν Εὐφημίαν τοῦ Ὀλυβρίου . . .

Δοχὴ δ', εἰς τὸ Φιλαδέλφιον . . .

Δοχὴ ε', εἰς τὸν Ταῦρον.

Return of the Imperial party in the evening from the Holy Apostles to the palace.

First reception, at the Lions . . .

Second reception, at St. Polyeuktos. There the demarch of the Blues with the deme of the Whites receives him, and the criers say: "Your divine Majesty is welcome." And the acclamations of eulogy are chanted by the criers and the people, as at the other receptions.

Third reception, at St. Euphemia in the quarter of Olybrius . . .

Fourth reception, at the Philadelphion . . .

Fifth reception, at the Forum Tauri.

(e) MS. *Digbeianus lat.* 112, f. 17^r-28^v (Bodleian Library Oxford); ed. K. N. Ciggaar, "Une description de Constantinople traduite par un pèlerin anglais," *REB* 34 (1976), 211-67. Dr. Ciggaar argues that this text was composed between 1063 and 1081.

26. In via sanctorum Apostolorum sunt duae ecclesiae sancti Stephani protomartyris, et in via iacet corpus eius subtus in altari.

27. In ipsa itaque via est ecclesia pulchra et magna sancti Poliocti martiris et est in ipsa caput eius.

26. In the way of the holy Apostles are two churches of Saint Stephen the protomartyr and in the way lies his body beneath the altar.

27. And in that very way too is the beautiful and great church of the martyr Polyeuktos, and in that church there is his head.

(f) *Patria Constantinopolēōs* III, 57 (= *Scriptores Originum Constantinopolitanarum*, ed. Th. Preger, p. 237).

Τὸν δὲ ἄγιον Πολύευκτον ἀνήγειρεν Ἰουλιανὴ θυγάτηρ Οὐαλεντινιανοῦ τοῦ κτίτορος τοῦ ἀγῶγος. Ἐκτίσεν δὲ τοῦτον εἰς χρόνους δ' ἡμῖς, τῶν τεχνιτῶν ἀπὸ Ῥώμης ἐλθόντων· γυναικαδέλφη δὲ ἦν τοῦ μεγάλου Θεοδοσίου.

Juliana, the daughter of Valentinian who built the aqueduct, erected the church of St. Polyeuktos. She built it in four and a half years, the workmen having come from Rome. She was the sister-in-law of Theodosius the Great.

The *Patria* is notoriously inaccurate. Anicia Juliana was granddaughter on her mother's side of both Valentinian III and of Theodosius II, it was the Emperor Valens who had built the Aqueduct, and it seems unlikely in the extreme that the workmen for St. Polyeuktos were brought from Rome. A figure of four and a half years for construction is at variance with that of three given by the generally more reliable scholiast of *Palatinus* 23.

Chapter Two

THE STRUCTURES

R. M. HARRISON

The Underpass Cutting (fig. A)

GENERAL DESCRIPTION

When archaeological work began, on 3 August 1964, work on the underpass was already well under way. Traffic still flowed east and west along the Şehzadebaşı Caddesi, but the Atatürk Bulvarı, which had carried traffic north and south, had already been excavated to a depth of some 6 metres on either side of the original crossing, and north- and south-bound traffic was diverted by means of temporary roads laid diagonally across the gardens. In the excavation south of the crossing, earth-removing machinery had exposed a sarcophagus in the east face and various structures, which were subsequently recognized as the east end of the church, in the west face. In the first short exploratory campaign, investigations were concentrated on these structures and on soundings in the gardens a short distance to the west (pls. 1, 2).

By 24 May 1965, when the archaeological team reassembled, the situation had been transformed. The two sectors of the Atatürk Bulvarı were now linked by an excavation approximately 80 metres square and 8 metres deep. Revetment walls were being built, and pile-drivers were busy in the central area, preparing foundations for the bridge abutments and supporting piers. A large number of ancient architectural fragments had been salvaged from the central area during the winter and spring, and there were some structural remains surviving, particularly in the east face and north-eastern sector. The excavation was festooned from west to east with high-tension electricity cables, which had bordered the Şehzadebaşı Caddesi and which were now suspended from rickety poles, like so many washing-lines.

In addition to its examination of this vast excavation for the underpass proper, the team was able to clean and study two outlying probes made by the municipal engineers. The first, Sounding 'A', lay in the north-

western sector of the Saraçhane crossing, the second, Sounding 'B', was against a pier of the Aqueduct of Valens. The team's main business, however, lay in uncovering what were now clearly the remains of the church, by trenches on both sides of the temporary road in the south-western sector, and little time could be spared for these forays.

When the team returned on 13 June 1966 for its third campaign, the underpass was almost complete. The bridge had been built and the roadways laid, and finishing touches were being put to pavements and pedestrian subways. The underpass was officially opened by the President of the Turkish Republic on 28 July.¹ The excavators had arranged for a signal to be passed from the underpass to the main site; as soon as the ceremonial tape had been cut in the underpass, they halted traffic on the temporary road (which had grown to four lanes), lifted a strip of cobbles, and planted the posts for a fence. When the crowds emerged from the ceremony an hour later, the temporary road had ceased to exist, and the two halves of the main site were henceforth united within one fence.

THE SOUTHERN APPROACH

This was available for investigation only in 1964. Machinery had already reached natural sand, cutting through a thick layer of black clay that overlay it. In the east face a plain sarcophagus of Proconnesian marble with gabled lid was uncovered, apparently in the clay. The trough, which was roughly dressed with a punch, had one boss at each end and two on each side. The trough's top outer edge was rebated to fit the lid's overhanging edge. Measurements of the trough were l. 2.645 m, w. 1.16 m, ht. (interior) 0.79 m, th. (sides) 0.175 m, (ends) 0.195 m, rebate w. and ht. 0.04 m; ht. of lid 0.29 m. The sarcophagus is presumably an outlier

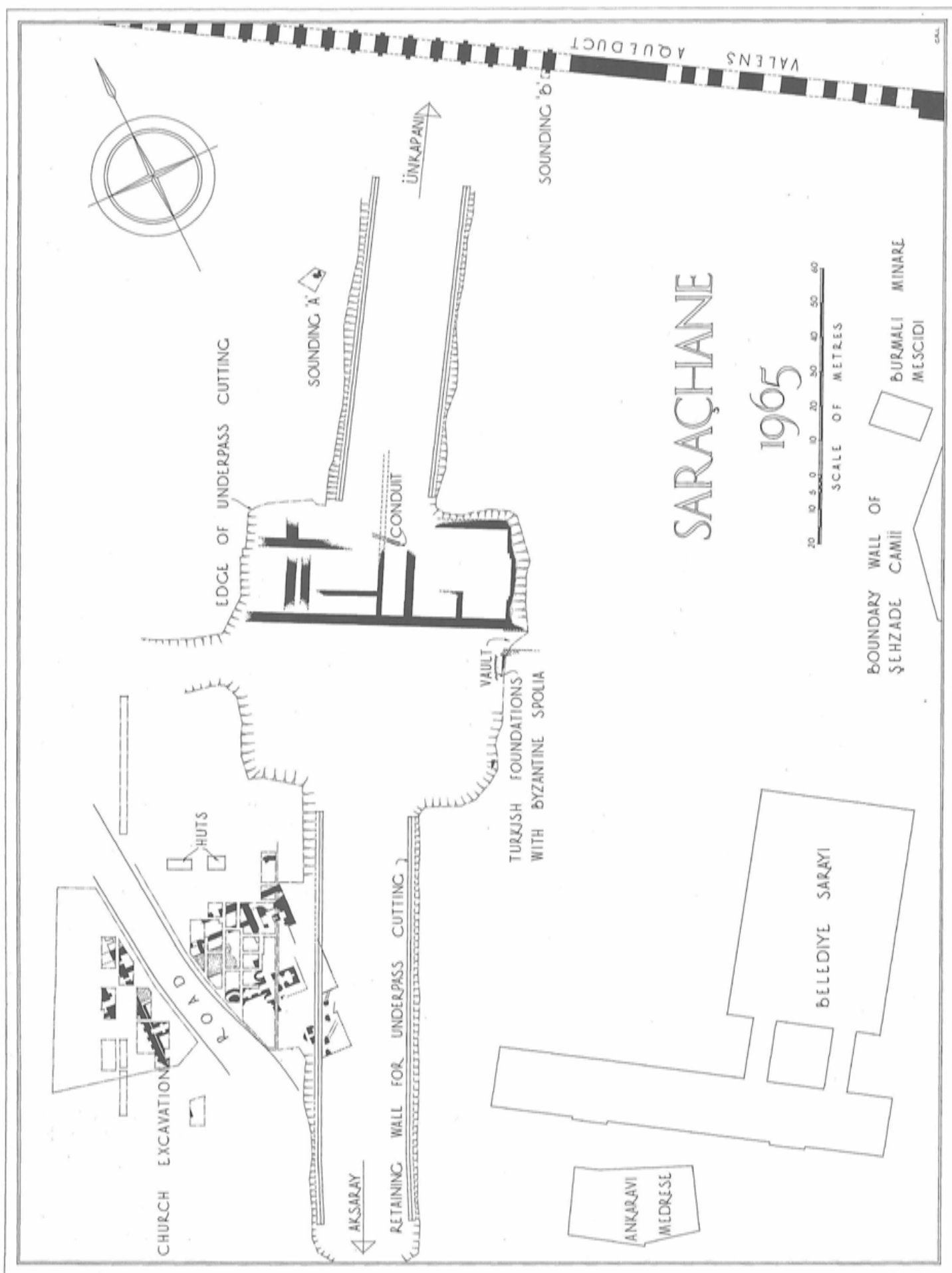


FIGURE A. General Plan of the Underpass

of the Roman cemetery, which extended to Beyazit. Nearby was a Corinthian capital of Proconnesian marble in quarry-state: ht. 0.475 m, lower diam. 0.46 m. The important structures in the west face, which were examined then and which proved to be the eastern part of the church, are more conveniently described with the rest of the church in the second part of this chapter.

THE CENTRAL AREA

The İbrahim Paşa Hamamı, whose late fifteenth-century remains were demolished during construction of the Atatürk Bulvarı ca. 1940, evidently occupied the southern part of the central area.² Its foundations, almost entirely made up of Byzantine *spolia* set in hard, pink mortar, were cut by the eastern edge of the road-works, where, in section, it could be seen that these foundations overlay wooden piles driven into black clay (pls. 3, 4, 7). The piles had left impressions both in the underside of the concrete and in the clay; they had been ca. 1 m long, ca. 0.10 m thick, tapering to a point and set approximately 0.35 m apart. The lower edge of the concrete foundations was ca. 5.0 m below modern street-level, and they were ca. 3.0 m thick; on these foundations, and rising from a floor-line at a depth of ca. 2.0 m, was a wall of similar concrete with *spolia* brought to vertical face. The *spolia* consisted of columns, column-bases, Corinthian capitals, Ionic impost-capitals, and impost-blocks. Much of this material was successfully salvaged.

Immediately north of these foundations, and running into the section provided by the eastern face of the underpass cutting, was an earlier barrel-vault of brick (span 5.68 m), the northern springing of which was built against an even earlier wall running east-west for the full width of the underpass (pls. 3-7). The crown of the vault lay ca. 2.50 m beneath modern street-surface, implying that floors associated with the adjacent İbrahim Paşa Hamamı would have overridden it. The vault on each side sprang from an offset wall of roughly coursed stone, the offset ca. 0.50 m higher on the south side than on the north; this may imply that the ground at this point was falling away to the north. That it was a gigantic drain is suggested by a small vaulted drain (ht. 0.70 m, w. 0.45 m) in the northern springing, which evidently opened into it. If it was a drain, it presumably ran from west to east, with the general fall of the land from Fatih to Beyazit; but why a major drain should be constructed along a watershed is a mystery, and perhaps it served a quite different purpose (cryptoporticus?). The brickwork was good

and appeared to be Early Byzantine. It had been laid up against the south side of a major stone wall, which is thought to be of the fourth or fifth century, when the wall was still standing (pls. 5, 6).

This wall, which had foundations of mortared rubble, was standing to five courses of large blocks with mortared joints, a total height of 1.85 m; above two lowest courses, where the wall was 2.50 m thick, there was an offset of 0.10 m on each face, reducing the thickness to 2.30 m. The great vault sprang from the level of the southern offset. The wall was traced westwards for a distance of at least 75 m, and its eastern part provided the southern limit of a large (?) hall, which was further defined by its east, west, and north walls.

The east wall, which lay in the side of the underpass cutting, was bonded into the northern and southern walls and had a recess 13.50 m wide and 0.70 m deep set centrally in an inner face 26 m long. In the hall's south-east corner a small area of pink mortar floor survived, on a heavy rubble packing (ca. 0.55 m thick), which rested on yellow clay; the floor-level was one course below the offset already noted in the south wall (pl. 8). The offset was repeated in the east and north walls, but, within the recess, this one course of stone above the floor carried, not further stone courses, but a brick wall standing to 11 courses (1.08 m) (pl. 9). The thickness of the eastern wall was not determined, that of the north wall was 2.30 m above the offset. The hall was internally ca. 26 m square, and to the west were various other walls on the same alignment.

SOUNDING 'A'

The discovery in the cutting of a pipe-trench north-west of the underpass during winter 1964-5 of a number of fine architectural pieces (e.g., items 1 and 18 in the next section) led to a probe in that area. A trench 5.60 m × 6.80 m disclosed an east-west wall (th. 1.20 m) of Turkish date with another from the south abutting it, both laid on wooden piles. Beneath these were found a robbed Byzantine brick wall (th. 0.75 m) running north-south, flanked by one grave and cut into by another, and, at 2.30 m from the modern ground-level, a pavement of *opus sectile*.

SOUNDING 'B'

The opportunity was taken briefly to explore a hole that had been dug by municipal engineers against the

south side of pier 44 of the Aqueduct of Valens.³ This sounding was taken to a depth of 6.50 m, where a rough course projecting 0.35 m-0.40 m from the face of the pier's buttress suggested that foundations had

been reached. This footing lay 11.90 m below the lower edge of the chamfered springing course for the Aqueduct's lower arches. An interesting discovery was of a double string-course 4.45 m above the footing.

Architectural Carving from the Underpass

APPROXIMATELY 120 pieces of architectural sculpture were recovered by the Archaeological Museum from bulldozer operations for the underpass during the winter 1964-5 and the following spring. Many had been built into the concrete foundations of the Ibrahim Paşa Hamamı and retained traces of that building's very hard pink mortar. They were all collected in the gardens north of the church excavation, where they were listed at the beginning of our second season. It is possible that several of the large granite columns described in chapter 5, 4 c, below, are also from the underpass and were brought to the church-site at that time. A summary list, with details of a few selected items, is unfortunately all that is possible here.

Capitals. There were fifty-four capitals, including one "Theodosian" capital, one basket-capital, two Ionic capitals, five Ionic impost-capitals, and one figured pilaster-capital of Corinthian type; the rest were Corinthian.

1. Capital of so-called Theodosian type.
Ht. 0.49 m; from area of subsequent Sounding 'A', level unrecorded (pl. 10).

2. UP91. Basket-capital with plain borders to trapezoidal panels; on opposed sides a simple cross with flared arms, and an erect five-lobed leaf.
Ht. 0.495 m, top 0.51 m square.

3. UP106. Upper part of figured pilaster-capital; frontal eagle with wings outstretched between volutes, standing on tip of central acanthus leaf (leaves?).
Ht. 0.39 m, w. of abacus 0.60 m.

4. UP29. Ionic impost-capital with simple cross in relief on front.
Ht. 0.38 m, w. (top front) 0.83 m, d. 0.88 m.

5. Corinthian capital
Ht. 0.76, abacus 0.94 m square. (The other 43 examples ranged in ht. from 0.46 to 0.735 m and in abacus width from 0.62 to 1.06 m) (pl. 11).

Imposts. There were thirty impostes, all with chamfered sides below narrow plain fillet; six carried a styl-

ized lyre-motif, three a palm-leaf design, the rest a simple cross.

6. UP2. Impost with shallow carving: central erect leaf flanked by double lyre-motif, one "lyre" within the other; within each pair an erect ivy-leaf upon an S-shape which is tied by a horizontal bar across the central leaf to the corresponding S-shape in the other "lyre" (pl. 12).

Ht. 0.40 m, w. 0.875 m.

7. Impost with palm-leaf decoration.
Ht. 0.395 m, w. (front) 0.85 m, d. 1.39 m.

8. UP34. Impost with simple relief cross on one face.
Ht. 0.395 m, upper surface 1.06 m square.

Column-bases

9. UP112. Octagonal column-base with concave sides in three steps supporting upper circular seating with central dowel-hole.
Ht. 0.44 m, upper diam. 0.46 m.

10. UP50. Column-base consisting of chamfered element between two vertical fillets, upon a square plinth.
Ht. 0.32 m, plinth 0.72 m square, top diam. 0.58 m.
One other similar base.

11. UP81. Column-base consisting of square plinth supporting large quarter-round moulding, narrow roundel, scotia, and vertical fillet.
Ht. 0.50 m, plinth ca. 1.40 m square, top diam. ca. 0.90 m.
Five other similar bases.

Consoles

12. UP95. Console; sides plain, end given *cyma reversa* profile between fillets, otherwise undecorated.
Ht. 0.325 m, w. 0.30, l. 1.26 m.
Three other similar consoles.

Posts

13. Post square in plan and decorated with countersunk panel with concave end.
Ht. 0.585 m, sides 0.19 m.
Two other similar posts.

Columns. Four fragmentary columns of Proconnesian marble; for granite columns, see introductory paragraph to this section, above.

14. UP111. Shaft with terminal fillet and central dowel-hole.

Ht. 0.88 m, diam. 0.21 m.

15. Shaft with terminal roundel.

Ht. 1.86 m, diam. ca. 0.50 m.

16. Middle section of shaft.

Ht. 0.61 m, diam. 0.44 m.

One similar piece.

Miscellanea

17. Semicylindrical block of *limestone*; at one end a roughly incised design of A†ω encircled by cord or rope.

Ht. 0.26 m, w. 0.25 m, l. 0.24 m (pl. 13).

18. Base to support elements of square and engaged semicircular plan, either a pier with engaged column or a bow-fronted ambo.

Ht. 0.47 m, w. 1.04 m, l. 1.72 m; from area of subsequent Sounding 'A', level unrecorded.

The Main Site (fig. B)

INTRODUCTION

When excavation began in 1964, neither the exact whereabouts of the church nor the extent and depth of its remains were known. The area in which discoveries had been made during grading operations in 1960 lay now beneath the lawns, paths, and flowerbeds of public gardens, and its precise location had been forgotten. On arrival, we probed structures that had been exposed by machinery in the underpass cutting, and then, encouraged by these, we laid out trenches in the gardens immediately westward (pl. 14). During the latter operation, we were watched with some mystification by a gardener, who lifted a stone in one of his lawns, exposing a small hole in the roof of what turned out to be the square room of the church's north-eastern sector; a ladder was obtained, and we simply descended.

A five-metre grid was imposed on the site, and squares were labelled alphabetically from east to west and numerically from north to south. In the description that follows, treatment is chronological: first, remains earlier than the church, then the church and its Byzantine modifications, and finally the overlying Turkish structures. Stratigraphic contexts (levels) are described and discussed in chapters 3 and 4, and the catalogue of architectural marbles is in chapter 5.

REMAINS EARLIER THAN THE CHURCH

Short sections of wall earlier than the church were found at various points (fig. B). It is notable that whereas the majority followed roughly the alignment of our grid, thus running at an angle of about 30° to the church, two in the area of the atrium had the same alignment as the church.

A deep sounding in M/7 disclosed the footings of a well-built wall of mortared rubble 1.30 m thick running east-west, abutted on its south side by a north-south wall 0.91 m thick, and bordered on its north side by a drain, of which the inner wall had been robbed, the outer wall was still standing to five courses (ht. ca. 0.95 m), and three floor-tiles remained.

In the area of what in 1964 we called Building A (the south-eastern part of the church where this was exposed in the underpass-cutting) there were some structural remains of an earlier period. A substantial north-south drain with floor two-tiles wide and western wall (ht. 0.95 m) still supporting the cover-slabs had been cut on the north by the construction of Building B (the apse-foundation) and on the south by an east-west wall, which, although not structurally tied into the south-east complex, is almost certainly a part of the church (figs. C, D).⁴ In H/19 the foundations of the church cut another earlier wall, ca. 1.25 m thick, of stone-faced, mortared rubble, on an alignment of about 40° from that of the church.⁵

Early levels incorporating structural remains survived in QR/12-13, where the central sector of each of the two parallel passages, which supported the church's north aisle, had not been levelled but was contained by light cross-walls. The principal feature of the northern of the two areas was a rough wall (th. 0.95 m) running east-west roughly parallel with the church-walls (pl. 33), of the southern a wall of rather better construction (th. 1.20 m) running north-south but approximately aligned with our grid and abutted by a narrower wall (th. 0.80 m) from the east (pl. 35). Early walling of an indeterminate nature was also encountered in M/14 and P/14. Whether the remains of a plaster floor in the nave

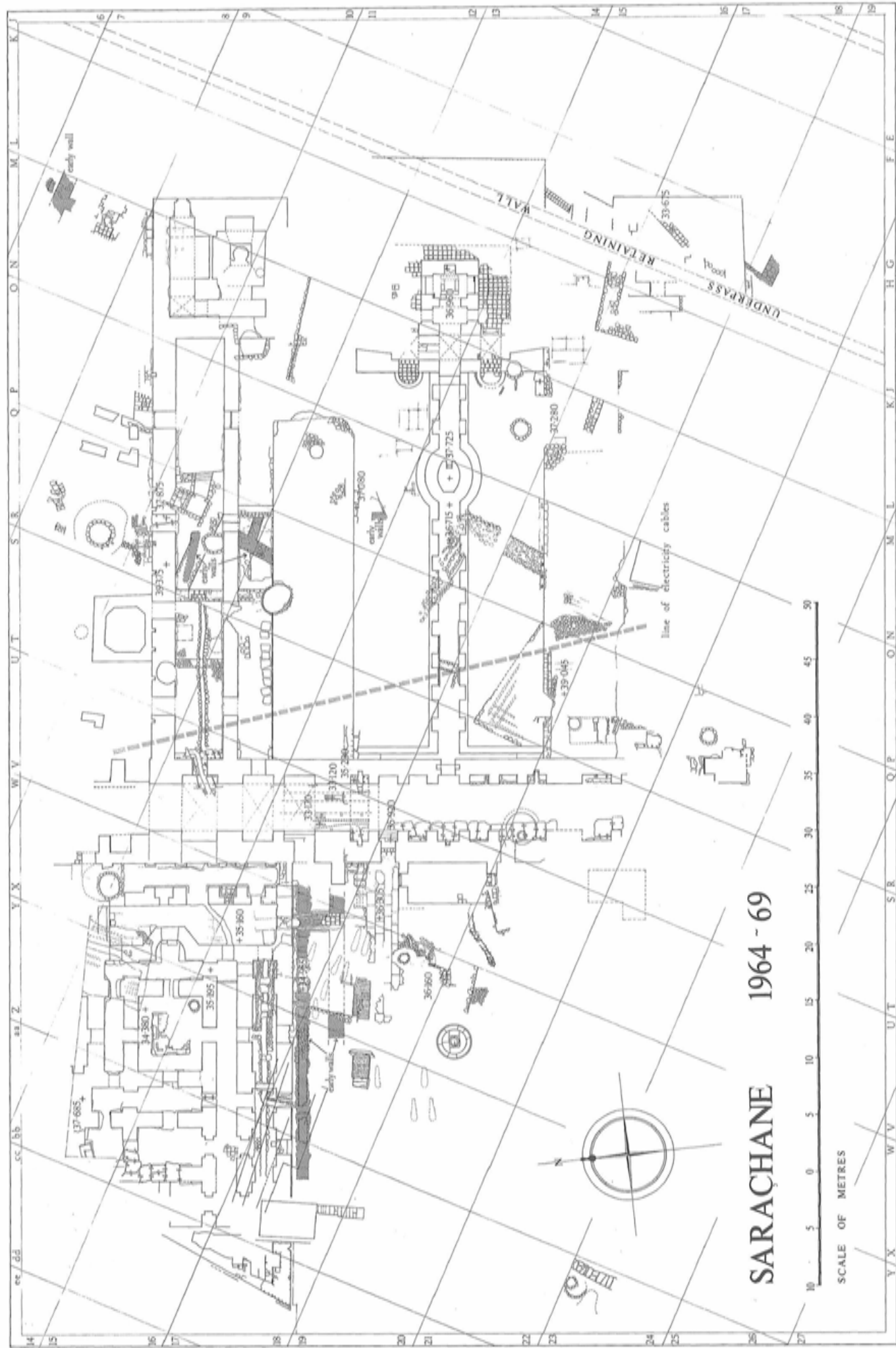


FIGURE B. General Plan of the Excavation (pre-church structures are hatched)



FIGURE C. Plan of Eastern Part of Church, 1964

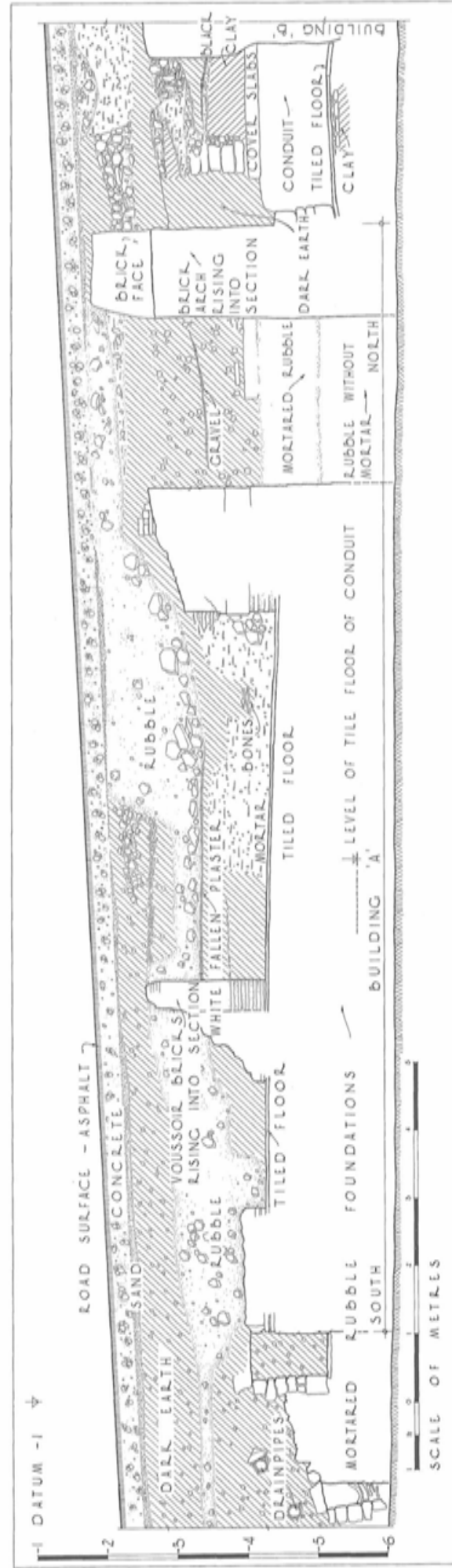


FIGURE D. Section of Eastern Part of Church, 1964

(see p. 21 below) antedate the church was not determined.

Much more substantial were the foundations of two parallel east-west walls which lay beneath the atrium-pavement and which were cut in W/16 by a brick-vaulted north-south drain, which also underlay the atrium-pavement and is thought to be contemporary with the church (pls. 63-65). The northern of these two walls, which were exactly aligned with the church, was 0.80 m thick on a foundation-course of large sub-rectangular blocks laid transversely, and the southern was 1.30 m thick but badly robbed; both were associated with fifth-century deposits (levels 1032* and 1033*).

THE APSE AND CRYPT

At the eastern end of the building a broad and solid platform of stone-faced mortared rubble was evidently the apse-foundation (figs. B, C, D, pls. 1, 14, 16). Its eastern face was 15 m long, surviving to a height of more than 2.72 m; the bottom was not reached. The masonry was of small mortared blocks, irregular below a narrow string-course at 1.50 m from the base of the wall, roughly coursed above it. At the north-east corner it could be seen in section that the foundation-trench had been cut more than 1.50 m into a deep stratum of black clay, from which a few small sherds, apparently Hellenistic or Roman, were extracted. Similar clay, overlying natural sand, was encountered in various parts of the site, and it thus appears that the construction-site was prepared with a dressing of clay brought in from elsewhere.⁶

The north-east corner and the south face of the platform were defined in 1964; its western part was explored in 1965, and its limit was found to be a crypt of square plan, consisting of an oblong, marble-paved room, which has an eastern and a western bay and a tile-paved ambulatory (pls. 16, 17). Of the six piers that defined the central room, four were found standing to eleven or twelve courses of brick, and the eastern pair, which had been destroyed, had left clear impressions in their plaster- and tile-surrounds. Narrow walls between the piers, separating the central room on its north, east, and south sides from the ambulatory, were, despite straight joints with the piers, presumably primary: the tile pavement was laid up against them, as was the mortar bed for the marble pavement. The outer walls of the ambulatory did not survive; its pavement was surrounded by a shallow robber-trench. The north, east, and south arms of the ambulatory were paved with tiles, six tiles wide on north and south, only

three in the narrower eastern passage, and the ambulatory walls were plastered, as perhaps was the ceiling. The western arm of the ambulatory and the central room were paved in marble; two large slabs were found *in situ* in M/14 and four smaller ones, the remains of *opus sectile*, in L/14. The walls, too, of the inner room had marble revetment, of which a small piece, against the north-western pier, was still in place, held by an iron pin that was wedged with marble chips.⁷

The west wall of the crypt had three openings: a central doorway (later blocked) leading from a passage beneath the nave and openings on either side which may have been planned as doorways but which were closed by semicircular walls built *a sacco* against the packing for the nave-floor, forming niches; each niche had a tile floor. Towards the north and south ends of this wall, on its eastern face there is an offset, from which the line of the wall changes direction, thickening to each end. The north and south walls of the crypt have not survived, but the offsets correspond with the lines of their inner faces, and the thickenings of the west wall may then correspond with the thickness of the north and south walls, being in effect the west sides of slightly oblique lateral entrances into the crypt.

The west wall of the crypt extended to the two great foundations flanking the nave (see below): the abutment at the south end was preserved in M/16.

At each butt-end, the lower half of the wall returns in a buttressing half-arch.

THE NORTH-EASTERN SECTOR

East of the north aisle and forming the north-eastern corner of the church was a group of chambers consisting of a roughly square room flanked on the west and north by corridors that opened onto the room. The north corridor, whose barrel-vault of pitched bricks was intact, had at its eastern end a narrow arched passage through the church's outer wall and a small marble-framed "doorway" (ht. 1.35 m, w. 0.78 m) inserted at a secondary stage in rough stonework flush with the face of that wall, within the arch (pl. 27). The overall length of the corridor was 10.40 m, its width 2.15-2.19 m, and at each end of the central, pitched-brick sector were arches (0.75 m wide to east, 1.10 m wide to west) of radially laid bricks. In the south side of the corridor a primary doorway (w. ca. 1.50 m and its centre 5.25 m from the western end) had been crudely enlarged to the full width of the square room's north wall and later blocked by a narrow wall of small stones set in hard,

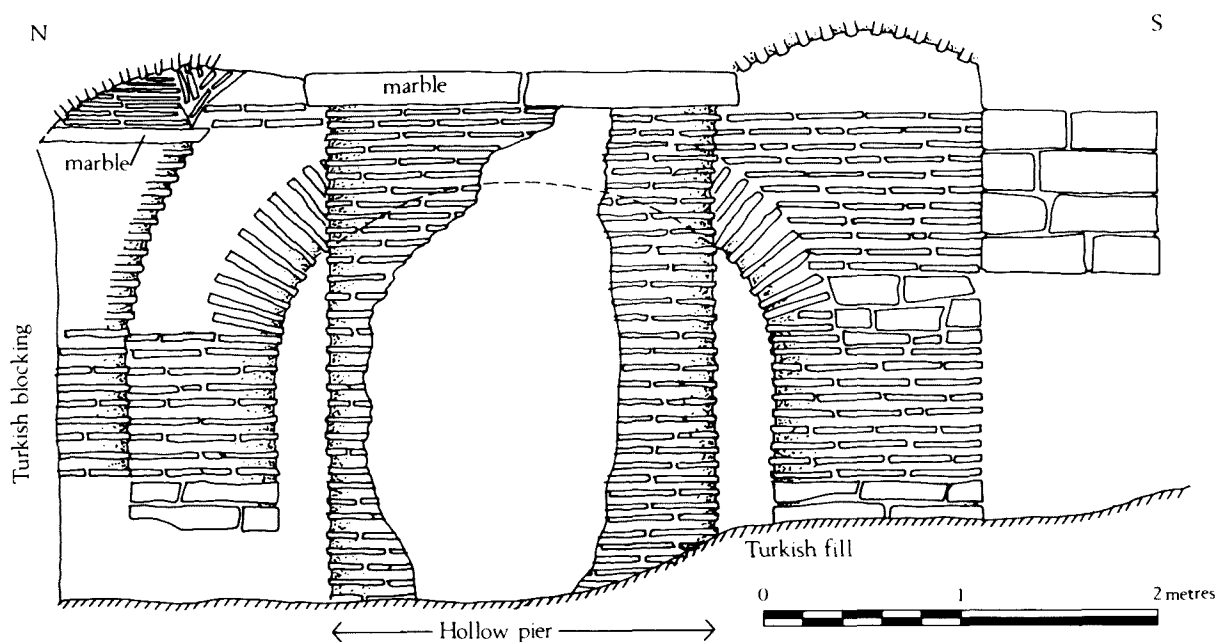


FIGURE E. Elevation of Square Chamber in North-east Sector, Looking East

white mortar. At the west end of the corridor was an intact cross-vaulted bay (pl. 21), opening by a brick arch to the south on to the western corridor, whose vault had been destroyed and which was choked with debris.

In the cross-vaulted bay the vault rose some 2.45 m above the top of the earth fill. In the north wall two courses of brick were visible above the earth, then a band (ht. 0.67 m) of roughly coursed stones, supporting eight further courses of brick (ht. 0.81 m); the northern arch was filled with roughly coursed stones (ht. 0.33 m) topped by three courses of brick (ht. 0.37 m). In the west wall, roughly coursed stonework carried one levelling course (ht. 0.35 m) of very large, irregularly projecting stones, from which the arch, filled by eleven courses of brick, sprung at a height of 1.45 m above the earth level. These bricks are set in white mortar, pointed with a very gritty, hard, red mortar, liberally mixed with fragments of crushed brick and pottery.

The square (or, more properly, cruciform) room had at its centre a brick-built well-shaft, square in plan, circular in bore, and capped by a marble slab 1.90 m square, and 0.14–0.18 m thick, from which sprung the four very flat barrel-vaults that spanned the surrounding area (fig. E, pl. 20). These vaults were evidently quite recent and preserved in their liberal mortar impressions of the planks used as centring. The four corner-piers of the room were primary and each car-

ried, upon a marble string-course 0.07 m thick, a few courses of the springing of the original cross-vault.

Only the eastern (outer) wall of the room and the arch across it were intact; the western wall was penetrated by a broad aperture (widening a primary doorway), hacked into the Byzantine brick work and 3.0 m wide; the northern wall, as we have seen, and the southern had similarly been hacked away and later blocked off with rough stone walls.

This complex of chambers had evidently been in recent use. Like the north corridor, the square room contained comparatively little debris, the top of the fill being ca. 2.80 m below the vaulting. On the fill lay the oxidized remains of two petrol-cans riddled with bullet-holes, and a sounding 0.75 m deep in the northern part of the room (levels 133–137) pointed to occupation from the mid-seventeenth century to the twentieth. Although we first entered the room through a hole in the roof in the south-west corner, access to both chambers must until recently have been by the western corridor (levels 140–143), which was perhaps not choked with debris until the bulldozing of 1960. The corridor is 5.20 m long, 1.45 m wide, and at its northern end is an arch formed of two concentric brick courses, which gave access to the cross-vaulted end of the northern corridor and which was later blocked by a rough stone fill (partly surviving). There was also a passage roughly hacked through the southern part of the corridor's western wall.

THE EXCAVATION

The north wall of the church was here 1.95 m thick, and its outer face was investigated in M/9. The wall was bordered by a drain running from east to west and with a floor of stone slabs 0.60 m wide; the church wall was faced with marble slabs 0.055 m thick, and up to 1.03 m high, slightly inclined so that the upper width of the drain was ca. 0.70 m, and of the outer wall there were two courses of rough stone, 0.46 m high. The largest of the slabs had three near-vertical slots ca. 0.21 m high and 0.02 m wide, perhaps for some form of pinning.

The church wall behind this facing was preserved to four narrow courses of stone, capped by four courses of brick, above which the wall itself had been robbed.

In the southern part of M/9, above the vault of the northern corridor, there was a floor of Byzantine mortar, with impressions, aligned with the church, of paving slabs 0.70-0.75 m wide and ca. 1.70 m long. These were the only intact traces in the excavation of the church's principal floor. One inference from this layout is that above floor-level the wall-thickness was reduced to 1.10 m.

THE SOUTH-EASTERN SECTOR

This appears to correspond exactly with the north-eastern sector described above. Machinery had already cut the underpass-section across the south-eastern corner in August 1964, when a plan and section were drawn for the First Report.⁸ During the following winter, machinery cut back the section still further, destroying brick walls and vaults and leaving exposed the remnants of brick walls in JK/17.

From the published section (fig. D) it will be seen that the square room and south corridor had tiled floors, laid on mortared rubble, and, from the plan, there was certainly a western corridor and access from it by an arched doorway to the room.

One problem is what happened in the space between the south-eastern complex (Building A in *DOP* 19 [1965], pp. 231-6) and the apse-foundation (Building B), a space of some 6 m (figs. C, D). The section revealed one intervening east-west wall, with a brick arch rising westwards into the section, and this (assumed in 1964 to be a part of Building A) cut a tiled drain containing fifth- and early sixth-century pottery. The drain was earlier than the apse-foundation and this wall, and it seems probable that the wall was contemporary with the south-eastern complex, albeit separate from it.

The brick-vaulted drain running diagonally through

the foundations of the south-eastern complex (H/17) is contemporary with it on both structural evidence and that of brickstamps, although it may of course continue the line of an earlier drain. The stone-capped drain built against the outer face of the church's south wall is also contemporary with it. It was not, unfortunately, possible to determine the direction of fall in these two cases.

THE NAVE

The nave is bounded at its western end by the wall that separated the church proper from the narthex, at its eastern end by the light transverse wall that forms the west wall of the crypt (pl. 22), and on the north and south sides by massive foundation walls of concrete. Along the axis of the nave ran a narrow under-floor passage connecting the substructure of the narthex with the crypt. At one point the passage widens to incorporate a concrete foundation of elliptical plan, which is set at the exact centre of the church and which must be regarded as underpinning for the ambo.

At the west end of the nave, the west wall is broken only by the doorway for this passage, which was later bricked up (pl. 36). The wall has a thickness of 1.40 m, although its foundations are broader to accommodate the series of pilasters that articulate the narthex substructure and supported its vaulting; these pilasters, on the wall's west face, will be described when the narthex is discussed below. The doorway (w. 1.25 m) has within it the rectangular slots for two vertical drain-pipes, which fed a stone-lined drain running east-west beneath the floor of the doorway, which in turn discharged into a large vaulted drain beneath the narthex floor. In its northern, better-preserved part the wall stands to a height of 2.10 m above broad greenstone foundations, on which are set nine courses of brick, a levelling course of stones 0.15 m thick, and ten courses of brick.

At the east end of the nave, a light transverse wall of brick forms the west wall of the crypt and appears to have provided an underpinning for the separation at floor-level between nave and bema (pl. 22). The wall is 1.10 m thick and is pierced by a central doorway 1.85 m wide. To left and to right are two other apertures, whose floor is raised, being formed by three brick-courses and which are closed by semicircular niches of brick laid *a sacco*. For the central 10.30 m of its length (a distance corresponding with the internal width of the crypt), the wall's thickness is regular. To north and to

south, however, there are 0.50 m offsets on the eastern face, from which the wall broadens to a thickness of 2.0 m at its ends.

This wall was laid against the massive northern and southern foundations, and at its northern and southern ends it was undercut by a half-arch, so that it was only in real contact with these foundations in its upper part.

The northern foundation was 7.0 m thick, broadening to 8.0 m at a levelling course of large projecting cramped blocks. In its lower courses it consisted of solid mortared rubble faced with roughly coursed stones; the wall was cut into natural sand, but its bottom was not reached in the excavation. Its levelling course of large and irregular blocks carried four courses of roughly coursed blocks capped by five brick-courses that ran right through the wall. Above this on the southern side and concealed behind one narrow course of facing blocks, was a tile-floored drain running westwards, to turn south against the western wall, drop a metre, and discharge by a steep channel against the west wall into an axial drain and into the narthex. Little more can be said of this gigantic wall, which survived for barely half a metre above the bricks and which had been completely robbed in its eastern part. The impression of a cramped block (presumably part of the same wall) is worth noting in N/12, as is the fact that the eastern edge of a concrete platform was observed in L/11.

As the ground slopes from north to south, the southern foundation is naturally less well preserved. Nonetheless, its northern edge was followed from the west wall to the point where it was met by the eastern transverse wall. Both in L/16 and in K/16 the impressions in concrete of cramped blocks suggest that the wall continued thus far. In Q/18 the westwards drain with floor of concrete tiles was particularly well preserved. In R/19 the south face of the foundation had been cut away and indeed undercut to form a rectangular chamber, which was also penetrated by a circular drilling from above.

From the narthex substructure to the crypt ran a narrow corridor, its walls 0.70 m thick, reduced in a regular series of rectilinear bays to a mere 0.20 m. At the east end its walls are built up against the east transverse wall, having the same width as that doorway. At the western end they stop short of the west wall, turning abruptly to north and south, to leave room for a water channel against the west wall.

The width of the corridor (without the bays) is 1.90 m, which is wider than the corresponding access in the

western wall (1.25 m). At the centre of the building, and in the eastern sector of the corridor, is a solid concrete foundation of near-elliptical plan, and this the corridor widens to embrace (pls. 23, 24).

This foundation is 2.73 m long, 1.95 m wide, and in its eastern face there is a steep-sloping recess 1.02 m wide, 0.97 m long. The concrete floor of the passage rises towards the east; the western end of the foundation was 1.25 m above the floor, the eastern end 0.91 m; similarly, the western sector of the northern curving passage-wall rose thirteen courses above the floor, the eastern sector ten courses.

In the passage's length, there were two recesses 1.25 m wide east of the ambo, and seven recesses west of it (pls. 25, 26). The corridor walls, like those of the two semicircular niches in the east wall, were built *a sacco*. It is clear that the nave floor was supported upon hardcore, made up of marble-waste chips laid upon black clay laid upon natural sand. In this case, what of a plaster floor with impressions of flagstones, ca. 0.70 × 1.80 m in NO/14 and O/15 (fig. B)? There are three possibilities: that it belonged to an earlier building, that it supported scaffolding during the construction of the church, and that it belonged to an earlier version of the church in which the nave-substructure, despite its width, was somehow to be vaulted. Of these possibilities, the third seems to be the least likely.

THE NORTH AISLE AND NORTH WALL

The floor of the north aisle was supported on two parallel barrel-vaulted passages, which raised it ca. 5.0 m above sixth-century ground level as established at the western end. The northern wall of the northern passage was the church's north wall, and the southern wall of the southern passage was the northern great foundation between aisle and nave. Each passage could, at least in its western sector, be entered by a doorway from the substructure of the narthex, and each passage was lit and ventilated by a series of four windowlike openings in the northern side of its brick vault. There was no access to or from the substructure of the church's north-eastern sector, and both passages were crossed at intervals by transverse walls, which thus closed off all but the western section of each. Only the western section of the north passage and the central sections of both were thoroughly dug by us to pre-church levels.

The church's west wall was founded on a broad course of very large greenstone blocks with dovetail-

cramps (pls. 30, 32). None of the cramps themselves had survived, and perhaps they were of wood.⁹ In the doorway at the western end of the north passage, these large blocks were separated to allow a drainage channel about 0.30 m wide, coming from east and north. Upon these blocks was constructed the north-south wall: 5 courses of brick, 4 courses of carefully dressed stone, variously 10 or 11 courses of brick, a course of rougher stone, and 11 more courses of brick to more stone and the springing of the doorway-arch, a height of 3.50 m.

The ground on the north side of the site originally sloped both south and west, and, to judge by the level in R/9 of the cover-slabs of the drain which runs westwards along the outer face of the church's north wall, ground-level outside the north wall of the church was approximately 2 m higher than that within the western part of the north passage (pls. 28, 29). The north wall is, on its inner face, cut some 3 m into sandy subsoil; constructed of concrete faced with rough, fairly small stones, it rises to a levelling course of large, irregularly projecting blocks, of which the west wall's single course of stone is one. This levelling course provides on the inside the springing of the brick barrel-vault which spanned the passage and on the outside the lowest visible course of the north wall, where it served as seating to five courses of brick, four of carefully dressed stone, and five more of brick, like the church's west wall. The southern wall of the north passage was similar to the northern, being cut about 3 m into the sand and then rising to a levelling course of projecting blocks from which the vaults spring.

Cut into the sixth-century floor was a narrow, stone-lined drain running down the centre of the passage and apparently cut by the foundation course of the church's west wall (pl. 34).

The western sector of the north passage was defined on the east by a transverse wall of roughly coursed stones with 5 courses of brick, which contained a bricked-up doorway (pl. 31). Although structurally secondary, this wall was thought to belong to the period of the church's construction.

Another transverse wall, 6.60 m east of the first, served to define a central sector, where, however, pre-church levels, including some nondescript walling (pl. 33), survived to within 1 m of the top of the stone levelling course. This central "room" can never have been used. Similarly, a third transverse wall, 1.80 m east of the second, retained a high-standing block of pre-church earth between them. These transverse walls thus served simply as membranes to brace the longitudinal walls. Little can be said of the eastern sector,

which was considerably modified in Turkish times (p. 32, below).

The situation in the northern passage was matched in the southern, where there were two transverse walls exactly aligned with the first two described above (pl. 35). Again, there were in the central sector remains of pre-church walls at a high level. On the south side of this passage the projecting levelling course (which is of course not in an ordinary wall but in the northern great foundation) is at a lower level and carries four courses of carefully dressed stone beneath the brick vaulting. At one point, the second "window" from the east, there is evidence for a cross-vault.

The church's north wall was broken by four "windows," which were arched in brick and for which the levelling course provided a sill. The wall-surface was, moreover, broken at irregular intervals by vertical slots, rectangular in plan, for terracotta drain-pipes, which discharged into a deep (1.50 m), covered drain running from east to west beside the church. This drain was exposed at three points: in M/9 it ran immediately beside the wall, simply separated from the brick work by a marble slab; in O/10 and R/11 it ran approximately 1 m from the wall (pls. 28, 29).

THE SOUTH AISLE

The southern part of the site had been so badly robbed that very little survived. What did survive, however, (the south-east and south-west corners of the church and the south edge of the southern great foundation) were exactly symmetrical with their counterparts on the north side, and it may safely be assumed, in a building which was in so many other respects symmetrical, that the south aisle too was carried on two parallel vaulted passages.

THE NARTHEX

The outer wall of the narthex-substructure, like the church's west wall, was built upon a broad foundation of large irregular blocks with dovetail cramps (fig. B, pl. 39). The foundations of each were broad enough to accommodate both the wall and its pilasters. The west wall of the church was constructed of five brick courses, four of carefully dressed stone blocks, variously ten or eleven of brick, a course of rough stone, and then brick into the vaults, with, above the eleventh course, a narrow course of chamfered marble (fig. F, pls. 42-5). The outer wall of the narthex consists of ten courses of brick, a rough greenstone block, ten more

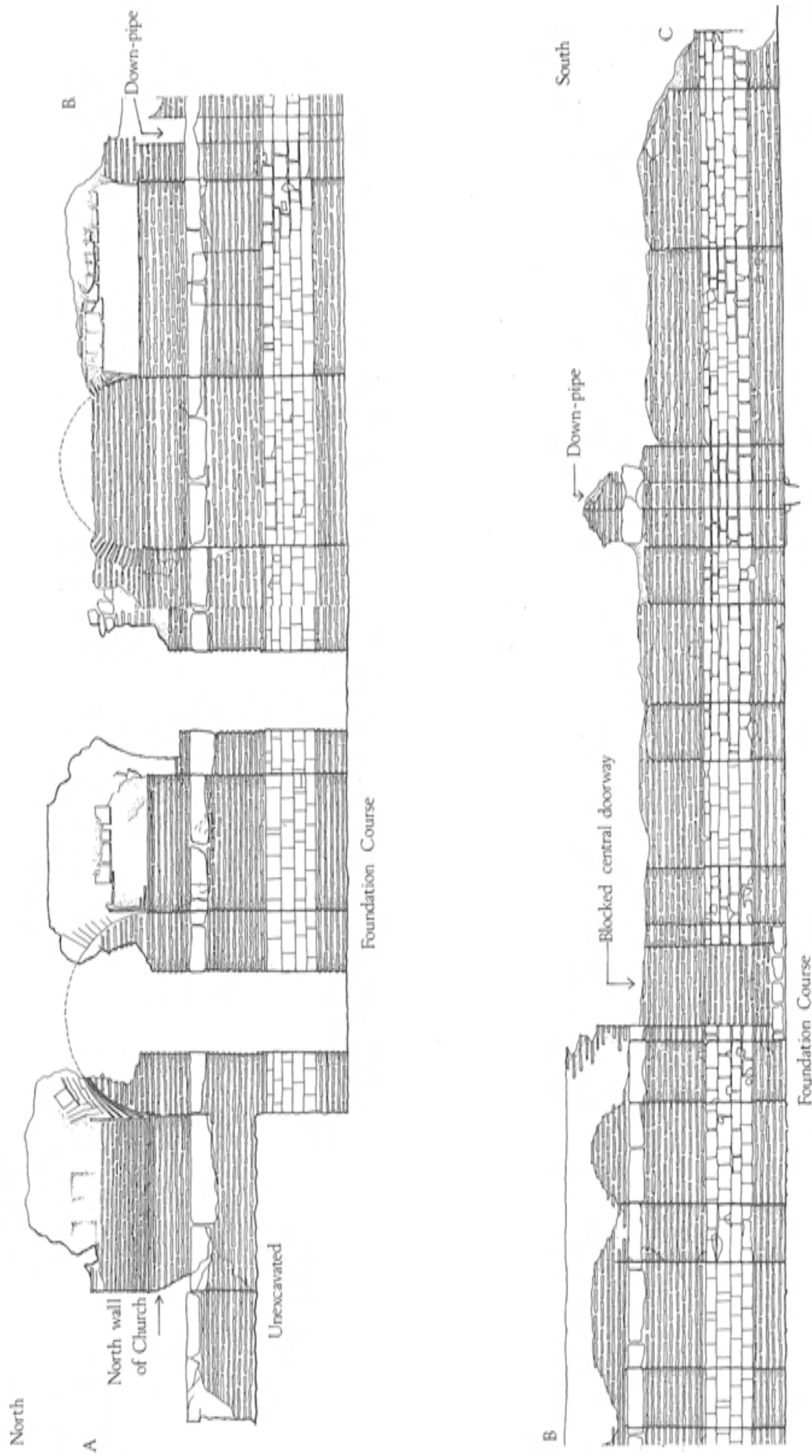


FIGURE F. Elevation inside Narthex-Substructure,
Looking East

courses of brick, another greenstone block, and then brick into the vaults, with a chamfered marble course above the seventh brick (pls. 39, 47).

The west wall of the church was broken by a central doorway (later bricked up) to the axial passage (pl. 36), by doorways to each of the two northern passages, and by corresponding doorways to the putative southern passages. The outer wall of the narthex was broken by two northern doorways leading down by four steps from the atrium (pl. 46), and presumably by a symmetrical southern pair; towards the northern end of the wall there had been a further doorway, opposite that into the northern aisle passage, but this was later blocked (pl. 47), presumably at the period when the substructures to the west were converted into a cistern.

Both walls had vertical rectangular slots for drain-pipes (fig. B, pl. 38), which fed two parallel barrel-vaulted drains running from north to south beneath the earth-and-plaster floor of the narthex-substructure. The drains were sectioned and bottomed in U/16 (pl. 37), the eastern drain being the narrower (w. 0.75 m), the western (w. 1.50 m) the more elaborate (chapter 3, fig. G, section 39). The latter, which had a pair of terracotta drain-pipes laid along its floor, was provided with marble inspection-covers ca. 0.65 m square at 12.90-14.58 m intervals; it was further equipped at regular intervals along its interior walls with pairs of bull-nose consoles set one above the other, each pair opposite the mid-point between consoles on the facing wall (pl. 41).

In the earth-fill that overlaid the floor above these drains were four terracotta drain-pipes, evidently running the full length of the narthex (pl. 40).

There was no wall across the northern end of the narthex-substructure, which opened by a broad barrel-vault into some sort of annexed continuation. Although this was, unfortunately, not fully investigated, it was noted that brick courses on the west (better preserved) side of the "annexe" sloped down towards the north, raising the possibility of an external ramp or staircase to the main floor and, perhaps, the gallery.

THE NORTH-WEST SECTOR

By this is designated the area west of the narthex and north of the atrium, and description is complicated by the conversion of primary substructures into a large secondary cistern (fig. G).

This extensive complex of substructures is defined on its south side by a wall that runs 39.50 m west from the outer wall of the narthex, and on its west side by a wall that runs obliquely to it, at an angle of 60°; the

northern limits of the area were unexcavated. The main feature of the complex is a system of substructures for an oblong building with an eastern apse; the substructures include a central room (pl. 50) enclosed by four passages, with two additional passages on the west; in the central room is a curious, badly preserved square foundation (pl. 51).

The south wall was pierced by at least four doorways on to the atrium; there may have been a fifth at the eastern end, and a sixth towards the western end where the wall is cut by a Turkish cellar. There is no bond with the west wall of the narthex; but the brickwork is similar (indeed the courses correspond), and there can be little doubt that the two structures are contemporary. Between this wall and the oblong building was a narrow east-west passage, down which ran a covered drain, falling to the east and fed by one tributary from the north (pls. 56, 57). The drain was cut by secondary blocking to the east.

The square foundation in the central room helped to carry the brick-vaulting for that room, a barrel-vault on each side, and a cross-vault in each corner. Whatever the square foundation supported, it is clear that it rose to the height of the principal floor. The central room, which had a doorway in each side, was surrounded by four passages, which again were barrel-vaulted, with cross-vaults at the corners. The preserved secondary blocking of an arched doorway in the outer wall of the north passage rose much higher than the arched doorways of the central room, demonstrating that the vaulting of the surrounding passages had been at a correspondingly higher level (ca. 0.75 m).

The square foundation consisted essentially of four brick-piers placed ca. 0.25 m apart in the form of a square. The inner corner of each pier has been cut back to provide a face concave in plan, leaving at the centre of the foundation a circular shaft ca. 0.80 m in diameter. The blocking of the spaces between the four piers and their subsequent plastering is associated with the secondary work on these substructures.

The implications are that the square foundation supported some sort of tank which was sunk into the floor above and that the waste passed down the centre of the shaft. It will be seen from the plan (Y/16) that the tributary into the main drain to the south is aligned on this foundation. This may then have been a baptistery.

The apse, which was pierced at this underfloor level by a doorway, was externally polygonal (half-hexagon), internally only very roughly semicircular (diam. 2.60 m).

To the west the walls were less well preserved (in-

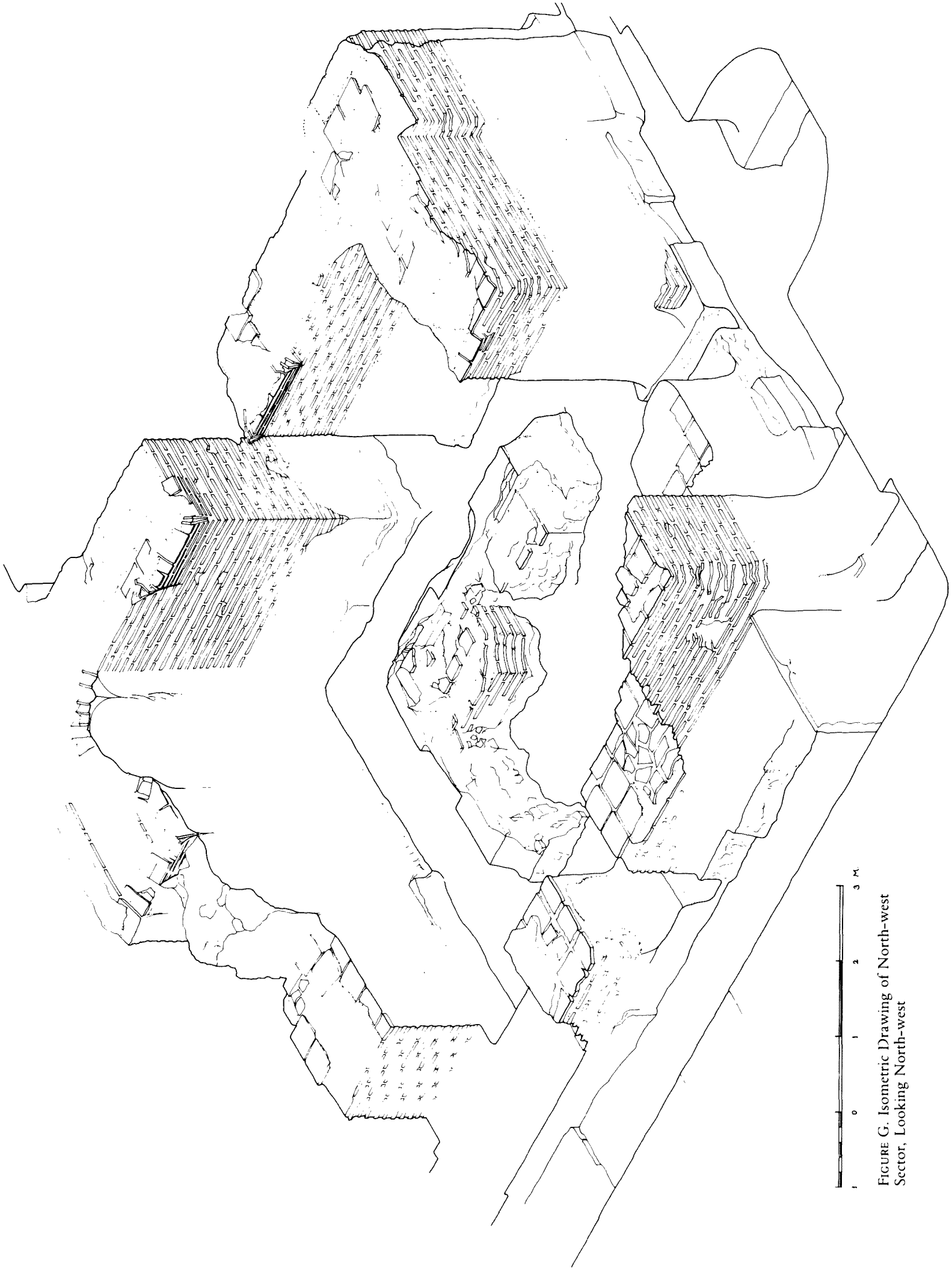


FIGURE G. Isometric Drawing of North-west Sector, Looking North-west

deed they were first recognized as a series of robber-trenches) (pls. 52, 54). They were, like the rest of these substructures, of brick upon the familiar large dovetail-cramped foundation-blocks. At one point, the two last surviving courses of brick were demolished in the hope of finding underlying cramps in place (pl. 55). The dovetail-slots were there as anticipated, but no trace of cramps. As for the south-west corner of the complex, with its acute angle and irregular internal space, this can best be understood by reference to the plan and photographs, where immured down-pipes can also be seen (fig. B, pls. 58, 59).

In its secondary stage, much of the complex was converted into a cistern (pl. 48). Doorways were blocked and walls and floors plastered. To roof the eastern sector marble pilasters¹⁰ were applied to the outer wall of the narthex and carried the springing of cross-vaults to a row of free-standing brick piers (pl. 49). The cistern was in two parts, one consisting of the eastern sector, the other of the central room and the north, east, and south passages of the apsidal building.

THE ATRIUM

The church was approached from the west by an atrium or court at approximately ancient ground level, access to the church's principal west door (which was of course at the higher level of the church's main floor) being provided by a broad axial staircase. The pavement was of marble, and to north and to south of the staircase four marble steps led down from the atrium into the substructure of the narthex. The atrium was delimited on its north side by a wall 39.50 m long, the southern wall of the group of substructures described in the preceding section. The southern part of the atrium had been badly robbed, and no trace was found of a corresponding wall on the south side.¹¹ The northern wall lay 13.55 m north of the atrium's axis; a symmetrical reconstruction would provide a width for the atrium of 27.10 m. Nothing, likewise, is known of the west end of the atrium, although it seems likely that this was oblique or polygonal rather than rectangular (see below, p. 405). A circular feature, which was constructed of reused marble pieces (including fragments of staircase parapet) on the atrium's axis some 7.0 m west of the staircase, was of late date and seems to have served as a graveyard-marker. Fallen at a late date, but proved to be a part of the primary church building, was a brick pier some 10.0 m long; this lay as it fell, presumably from the upper part of the outer wall of the narthex. It has already been shown (see above, p. 18)

that substantial pre-church walls underlay the atrium; the situation was further complicated by a number of drains, both pre-church and of the period of the church, and by a deep robber-pit of the twelfth century.

The staircase in plan was 8.45 m square, and it was underpinned by a half-barrel-vault of brick constructed against the outer wall of the narthex (pls. 66, 67). Each end of the vault was closed by a brick wall containing a door, and the vault was paved with square terracotta tiles. The inner radius of the vault, which was only partially preserved, was 3.60 m, which, when the length of the bricks is added, provides a minimum height for the underpinning of the topmost step of about 4.0 m. The rest of the staircase was of concrete, faced with rough stones, and part of the bottom step, of marble, was found *in situ* (pl. 82).

An area of marble pavement, consisting of four rows of rectangular slabs, 0.55 m, 0.60 m, 0.70 m, and 0.70 m wide, respectively, from south to north, and up to 1.60 m long, was found intact against the north side of the staircase (pls. 66-8). To north and to west the pavement was cut by a deep robber-pit, whose objective appears to have been the two underlying pre-church walls and which was back-filled with twelfth-century material (pls. 64, 65). Also exposed were a north-south brick-vaulted drain, which had passed below a doorway (in X/15-16) in the long wall on the north side of the atrium and was cut by the late blocking of that doorway; it cut both pre-church walls. This drain and tributary feeder-drains, lying parallel to the north side of the staircase and 3.25 m from it, were contemporary with the church.

Lying east-west (in X/17-Y/18) as fallen were the substantial remains of a brick pier attributable to the church's western facade (pls. 69-73). The pier is here described from its eastern (lower) end:

(a) About five courses of brick.

(b) A marble cornice, with plain *cyma reversa* moulding at its northern and southern ends (ht. 0.22 m, w. 1.08 m, l. 1.63 m). On the original upper surface of the block was a large simple cross in dark red paint, the bars rendered as single lines with triangular terminals (ht. 0.74 m, w. 0.35 m) (pl. 74).

(c) About thirty courses of brick, of which the lowest two were interrupted by a beam-slot rectangular in section (ht. 0.23 m, w. 0.30 m), which passed vertically through the pier in its fallen position; the slot was lined on each side with brick fragments (pl. 75). The north side of this section of the pier had some glass mosaic tesserae still adhering to plaster, but the design could

not be reconstructed; there was some slight evidence that the south side too may have been similarly decorated.

(d) A marble cornice (2 c i, pl. 121), moulded at its northern and southern ends and decorated on the latter (ht. 0.34 m, w. [of moulded faces] 0.84 m, l. [of soffit] 1.45 m, [overall] 2.01 m).

(e) Fourteen courses of brick, of which the stamped bricks were plotted (see below, chapter 10, sec. I, no. 6) and the mortar sieved. The mortar included a substantial number of tiny fragments of identifiable pottery (level no. 920*), none clearly later than the sixth century, implying that this pier belonged to the church's primary period; the mortar also contained small and worn mollusc fragments, implying either that the sand was sea-sand or that sea-shells were a deliberate ingredient.

(f) A rough marble course (ht. 0.44 m). The width of this brick pier was 1.40 m, and the total height of the surviving part was ca. 10.0 m; its lower end lay ca. 9.50 m west of the western wall of the narthex.

As the only masonry that survives from the church's superstructure, it constitutes an important piece of evidence for any reconstruction. Its implications are discussed below, chapter 15.

On the axis of the atrium and some 7.0 m west of the staircase a circular monument was erected, comprising rough foundations of stone and marble, a hexagonal column-base (see below, chapter 5, no. 7 d i) surrounded by a floor of marble slabs, and a circular moulded plinth (12 b i-vii) 3.00 m in external diameter (pls. 75-8). All these pieces were *spolia*, and the foundations were found to include many joining fragments of two large parapets (left and right) for a staircase of at least eight steps (13 h v), probably the nearby staircase to the main church door.

The monument lay above the level of the atrium-pavement rather than upon it; but it was discovered at the end of the final campaign, and there was no time to examine underlying layers. Its construction is associated with the cemetery which developed here at a late period (twelfth century). The cemetery appears to have been in use for some time (perhaps a century), and indeed one late burial (95) overlay the monument's foundation; there were evidently several phases, but these were not satisfactorily distinguished.

BURIALS

A large number of burials were excavated, the overwhelming majority from a late Byzantine cemetery that

overlay the atrium (fig. H). Isolated graves were found in Sounding A, and in the areas of the apse, north aisle, and narthex; one of these, the grave of a child (no. 10), was cut into a Turkish layer.

The cemetery was dug with great difficulty, and piecemeal. Burials were aligned east-west (with head to west); some were in rough cist-graves, others in simple scooped hollows. In some cases coffins were used (attested by nails). Four burials (nos. 67, 80, 99, 106) included small pottery vessels, one (no. 106) a small cross of lead, another (no. 96) a part of a bronze reliquary cross. A hoard (or purse) of scyphate bronze coins of Isaac II appeared to be associated with one burial (no. 47), and three other graves produced each a single coin. Burials were generally supine and extended, the arms folded across the chest or hands across the stomach.

Few burials in the cemetery were intact, having been cut through or otherwise badly disturbed in Byzantine or Turkish times. Burials were often multiple, dug into and dislocating earlier graves, which underlay them. It is clear that the cemetery was in use for some considerable time, and some burials appear to have been sealed by the church's destruction debris, others to have been cut into it. It has, unfortunately, proved impossible to produce a clear chronological sequence. In addition to the formal burials that overlay the atrium, several large groups of mixed human bones were found both in and below the destruction debris which filled the grand cistern.

The skeletal material is discussed below (chapter 13); the burials may be listed summarily as follows, numbers 11 and following being attributable to the Byzantine cemetery. The serial numbers in the burials list which follows do not always represent single individuals. In some cases large numbers of mixed bones were found together during the excavation and collectively given a single number (e.g. 127). There are instances when a degree of confusion has arisen in the records and different groups of mixed bones from the same level will be grouped together under a single number (e.g. 113). Conflation has also taken place when several indistinguishable heaps of bones were found in the same level (e.g. 128). In this listing, the serial number is followed by level number, grid reference (in parentheses), and notes.

1. 6 (Sounding A). N-S alignment, enclosed by Byz. wall.
2. 6 (Sounding A). N-S alignment, enclosed by Byz. wall; small jug.

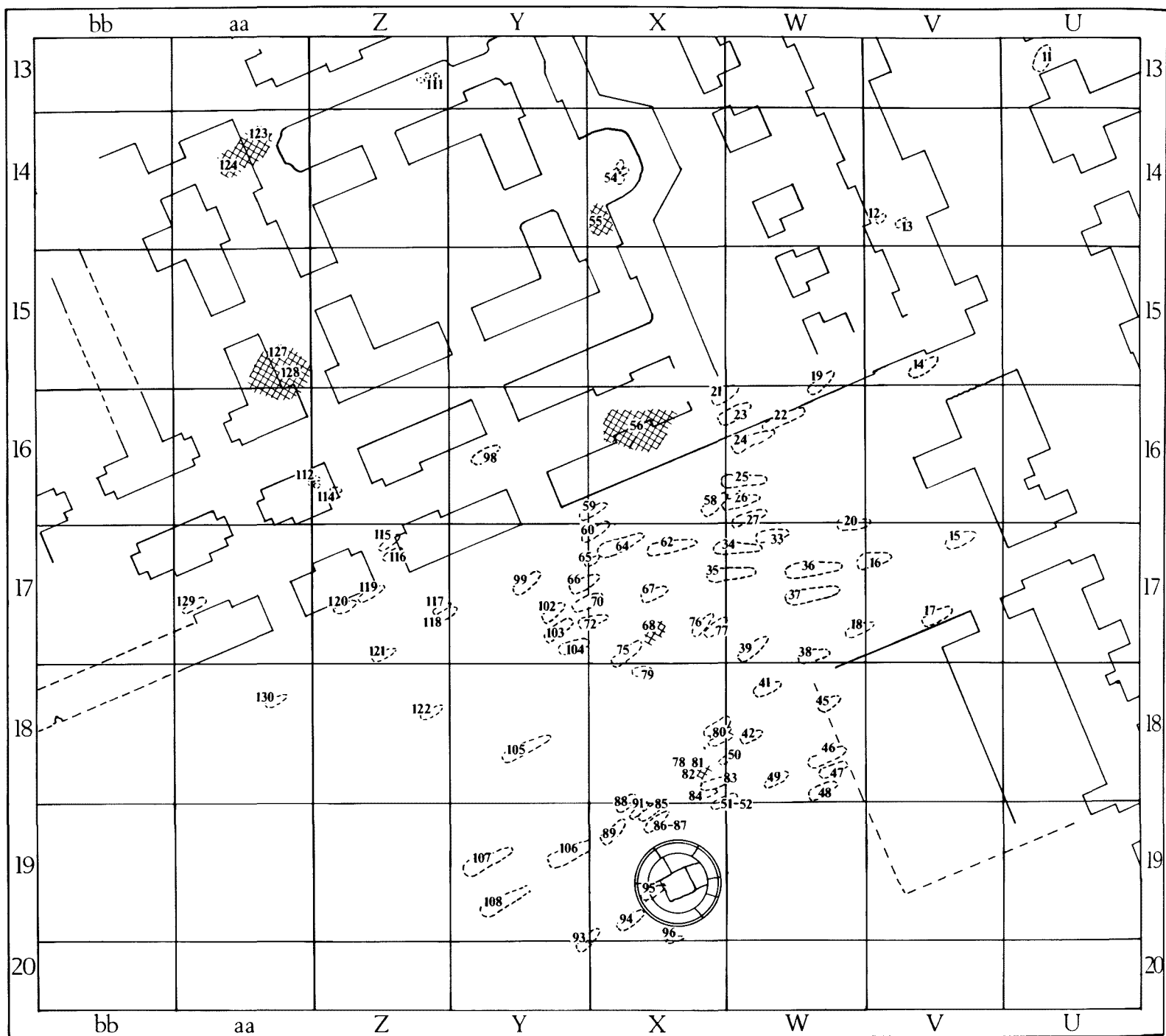


FIGURE H. Plan of Burials in Area of Atrium

THE STRUCTURES

3. 55* (K/14). N-S alignment, cist, head on brick pillow; coin (205) and two nails.
4. 83 (L/13). Grave scooped out of mortar foundation.
5. 92* (L/14). Burial beneath marble pavement.
6. 92* (L/14). Child.
7. 92* (L/14). Covered with marble slabs.
8. Cist burial in LM/15 baulk.
9. 515 (S/12). Skull.
10. 515 (S/12). Child; ridged tiled structure.
11. 693 (U/13). Skull and several long bones; no cist.
12. 833* (V/14). Skull; coin (851).
13. 833* (V/14). Skull.
14. 871* (V/15). Mixed bones.
15. 861* (V/17). Head on brick pillow, stone slabs forming cist.
16. 861* (V/17). Child.
17. 861* (V/17). Head on brick pillow.
18. 863* (V/17). —.
19. 910* (W/16). Broken and incomplete bones.
20. 869* (W/16). —.
21. 925* (W/16). Skull and shoulders only: cist.
22. 871* (W/16). One burial cut into and disturbing two others (pl. 80).
- 22a. 871* (W/16). —.
23. 922* (W/16). Cut by Turkish pit.
24. 922* (W/16). Skull and shoulders.
25. 922* (W/16). Pelvis and legs only (pl. 79).
26. 922* (W/16). Coffin nails: cist (pl. 79).
27. 922* (W/16). Complete (pl. 79).
28. 922* (W/16). Underlying 27.
29. 922* (W/16). Skull overlying 30-32.
30. 922* (W/16). Includes Leg-bones underlying 27.
31. 922* (W/16). Includes Leg-bones underlying 27.
32. 922* (W/16). Includes Leg-bones underlying 30.
33. 922* (W/17). Skull.
34. 1016* (W/17). Skulls.
35. 1016* (W/17). Skull and shoulder.
36. 936* (W/17). Cist (pl. 81).
37. 936* (W/17). Cist (pl. 81).
38. 942* (W/17). Complete.
39. 869* (W/17). Coffin-nails; no cist; tile over head.
40. 929* (W/17). Fragmentary.
41. 955* (W/18). Legs and pelvis only.
42. 955* (W/18). "Tomba a cappuccino".
43. 948 (W/18). Disturbed.
44. 948 (W/18). Disturbed.
45. 955* (W/18). Legs and pelvis in niche hacked into foundations.
46. 960 (W/18). Overlying bottom step of main stair, pelvis and legs only (pl. 82).
47. 955* (W/18). Above 48; coin hoard (854, 868-875, 877) probably associated with this skeleton.
48. 955* (W/18). Complete.
49. 955* (W/18). Legs and pelvis only.
50. 962* (W/18). Legs and pelvis only.
51. 962* (W/18). Child, l. 0.75m.
52. 962* (W/18). Legs missing.
53. 977* (X/12-14). Mixed bones.
54. 1380a* (X/14). Large conglomeration of skulls and other bones on apse floor.
55. 1380b* (X/14). Large heap of bones beneath marble paving slabs.
56. 1015* (X/16). Large heap of mixed bones.
57. 1048* (X/16). Numerous disarticulated bones.
58. 934* (X/16). Three (possibly four) cists.
59. 1041* (X/16). Pelvis and legs only.
60. 1041* (X/17). Incomplete.
61. 1041* (X/17). Skull missing.
62. 1016* (X/17). Complete.
63. 1016* (X/17). Skull.
64. 1016* (X/17). Feet only.
65. 1041* (X/17). Child, upper body only.
66. 1041* (X/17). Skull and neck missing.
67. 1041* (X/17). Cist; nails and pots associated with burial.
68. 1053* (X/17). Mixed bones.
69. 1043* (X/17). Disarticulated skeletons, including at least seven skulls.
70. 1041* (X/17). Child.
71. 1041* (X/17). Part only.
72. 1041* (X/17). Child.
73. 1041* (X/17). Child (?), skull and shoulders.
74. 1041* (X/17). Skull.
75. 1053* (X/17). Ankles and feet (= 45?).
76. 869* (X/17). Mixed bones from two individuals.
77. 869* (X/17). Child; cist.
78. 962* (X/18). Skull and shoulders.
79. 1056 (X/18). —.
80. 1056 (X/18). Three graves found with two complete vases.
81. 962* (X/18). Skull only.
82. 962* (X/18). Jaw-bone only.
83. 962* (X/18). Cist; coffin-nail; lacking feet.
84. 962* (X/18). Skull.
- 85-93. 962* (X/18). —.

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94. 962* (X/19). Child.
95. 962* (X/19). Legs overlying circular structure.
96. 972* (X/19). Found with bronze cross (637, pl. 436).
97. 1357 (Y/13). Rough burials.
98. 1059 (Y/16). Broken and incomplete remains of at least three children and one adult.
99. 1060* (Y/17). Complete; small jug and coin on edge of grave.
100. 1046* (Y/17). Part of skeleton.
101. 1069 (Y/17). Part of skeleton.
102. 1041* (Y/17). Cist.
103. 1041* (Y/17). Child.
104. 1070* (Y/17). —.
105. 1081* (Y/18). Complete but broken.
106. 1081* (Y/19). Cist with parts of three skeletons; small jug and lead cross (623, pl. 424).
107. 1081* (Y/19). Pelvis and legs only.
108. 1081* (Y/19). Pelvis and legs only.
109. 1294 (Z/13). Scrappy.
110. 1294 (Z/13). Numerous skeletons found in same place as 109.
111. 1336* (Z/13). Heap of bones (pl. 83), against wall of cistern; two bronze reliquary crosses (635-636, pls. 435-6).
112. 1151* (Z/16). Mixed bones.
113. 1094* (Z/16-17). Mixed bones.
114. 1088 (Z/16). Child.
115. 1176 (Z/17). Child.
116. 1176 (Z/17). Child.
117. 1181* (Z/17). Skull.
118. 1181* (Z/17). Skull.
119. 1177* (Z/17). Child.
120. 1178* (Z/17). Child.
121. 1180* (Z/17). Complete.
122. 1162* (Z/18). —.
123. 1298 (aa/14). Rough multiple burial.
124. 1298 (aa/14). Rough multiple burial.
125. 1298 (aa/14). Heap of bones.
126. 1368 (aa/15). Mixed bones.
127. 1112* (aa/15). Large number of very fragmentary bones.
128. 1112* (aa/15). Large number of mixed bones.
129. 1160* (aa/17). Ankles and feet only.
130. 1167* (aa/18). Skull and shoulder only.
131. 1410 (aa/23). Skull only.
132. 168 (M/14). —.
133. 384* (R/9-11). —.
134. 384* (T/17-18). —.
135. 384* (U/18-19). —.
136. 384* (VW/14-15). —.
137. 1005 ((X/15). —.
138. 1047* (XY/16-17). —.
139. 1048* (XY/16-17). —.
140. 1091* (Z/16-17). —.
141. 1091* (Z/16-17). —.
142. 1343 (y-bb/13-15). —.
143. Provenance unknown. This number includes several groups of bones whose provenance and excavation were not adequately recorded.

REMAINS LATER THAN THE CHURCH

After the collapse of the church in the early thirteenth century, the site appears to have lain for a long time derelict, serving only as a quarry for marble and brick. After the Turkish Conquest of 1453, however, it was soon reoccupied, to judge from various late fifteenth-century deposits found in the eastern sector (fig. 1). The site then continued to be occupied throughout the Ottoman period, apparently until about 1940. Various levellings, both then and again in 1960, have stripped the site of most of its later Ottoman and more recent structures, which are, however, amply attested by scraps of wall and drain and by rubbish-pits and wells. The majority of the surviving walls of the Turkish period appear to be of the sixteenth and seventeenth centuries, and they lay immediately below the modern surface and immediately on top of Byzantine walls. This, incidentally, provides the date by which at least the majority of the masonry of the nave and north aisle had been reduced to its present height.

Structural evidence of the Turkish period is of various types. These include broad, shallow, timber-laced rafts of concrete, evidently the footings for timber construction; massive, deep, timber-laced foundations of concrete, evidently to carry substantial masonry; walls, floors, drains, stone-lined pits, and wells; the remains of a small bath house; a barrel-vaulted fire-shelter; and adaptations to substructures in the church's north-east sector (including provision of staircases down into the eastern part of the northern north-aisle passage).

In M/7-8, immediately below the surface and embodied in a broad concrete raft, were remains of a private bath installation (*Konak hamamı*) (pl. 84). A circular, tile-paved hearth (diam. 0.55 m) was defined by five stones and fronted by a tile pavement edged with a row of tiles set on end; behind the hearth was a broad (1.46 m) open space with a rectangular flue-slot on each side.

In the north-east of the church-substructures, the cruciform room and the passages that flank it to west

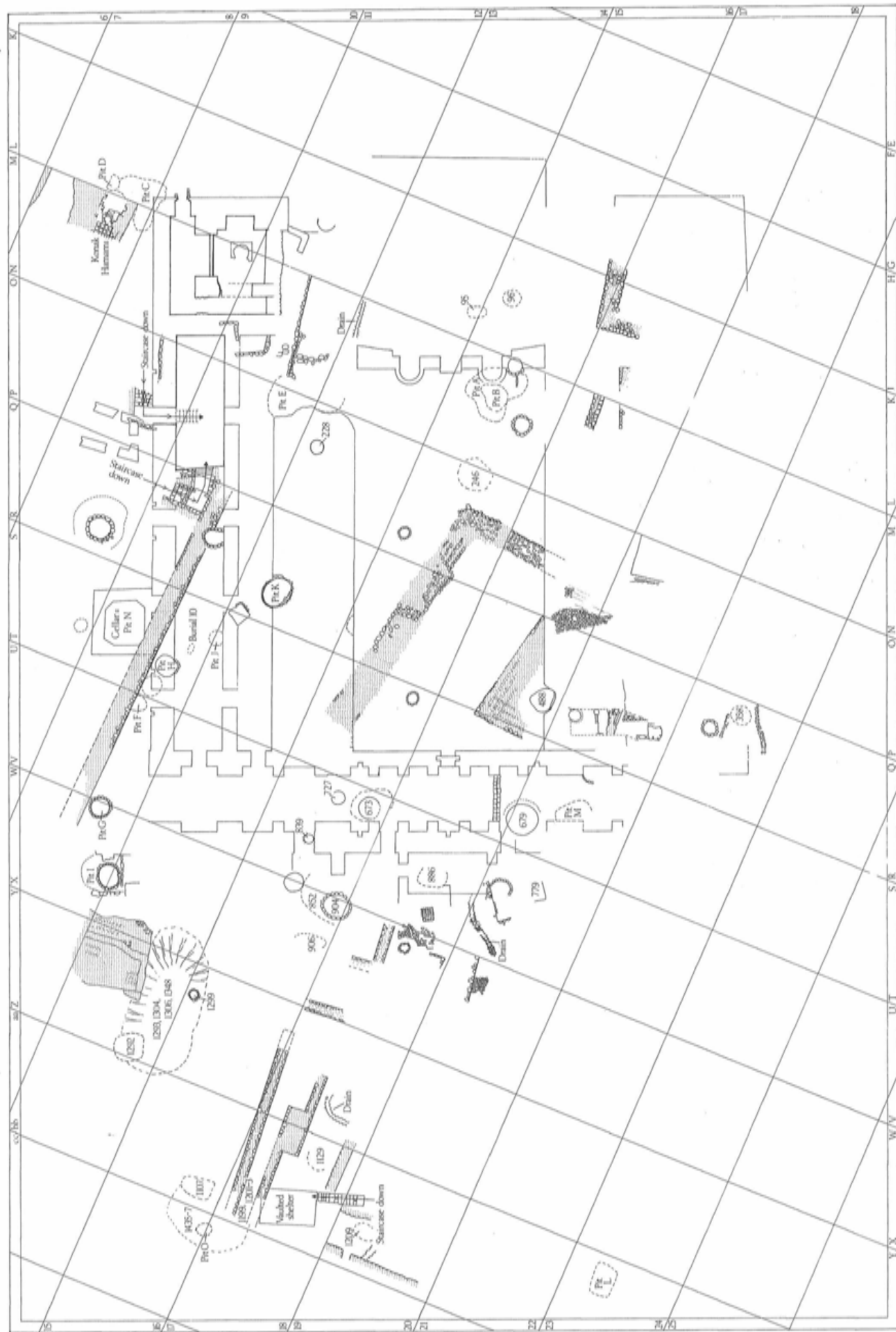


FIGURE 1. General Plan of Principal Turkish Features (with level-numbers for minor pits)

and north were accessible in Turkish times by a rectangular "window" (ht. 1.35 m, w. 0.78 m) at the end of the northern passage. At some period doorways on the north, west, and south sides of the cruciform room were crudely widened, and those on the north and south sides then blocked up with walls of mortared rubble. In the centre of the room stood a rectangular brick pier, which was pierced by a circular shaft; this pier was capped by a pierced slab of marble, from which sprang four shallow barrel-vaults of poor and recent construction, replacing sixth-century cross-vaulting, whose springing was still visible at the corners of the room. The pier was thought to be primary on grounds both of brick work and of the narrow span of the primary cross-vaults, which sprang at a comparatively high level and required a central support. Why it should have been pierced by a vertical shaft, perhaps at the time of the secondary vaulting, is a mystery. Soundings in the cruciform room penetrated from modern levels (133) to mid-seventeenth-century material from beneath the north and south blocking walls (137); there was seventeenth- and late sixteenth-century material too in the western passage (142, 143).

The eastern sector of the northern passage beneath the north aisle was in use until recently as an underground cellar or fire-shelter. Its floor was paved with hexagonal tiles, and access was from the west by a staircase leading down from the north into a small anteroom; there was another, and probably more recent, staircase descending from the external "window" in the church's north wall which now served as a doorway.

The western staircase turned against the concrete footings of a Turkish wall, which ran westwards for at least 30 m and which was either contemporary with or (more probably) earlier than the staircase (pl. 85). The concrete was timber-laced, 1.70 m wide, and generally ca. 0.25 m thick, and the wall it carried would have been of timber. These footings and the upper part of the staircase were built over the remains of the church's north wall, which had thus already been destroyed to its present height. The concrete footings appear to be of late sixteenth-century date, to judge from underlying material (e.g., levels 423, 542).

In the north-east sector of the Byzantine cistern (Y/13) a small Turkish substructure, consisting of a barrel-vaulted chamber open at its western end, was excavated, recorded, and removed. The cellar was constructed of timber-laced concrete, and its earth fill retained impressions of the vault's timber centring, which had rotted in place. It seems that a horizontal

beam triangular in section had been laid on stones along the axis of the chamber, and that radial props for the shuttering were then nailed to it. The structure was no earlier than the late nineteenth century.

In bb/18 was a small, intact, barrel-vaulted cellar, entered from the south by a flight of steps and narrow doorway and probably a fire-shelter. Eastwards ran three parallel deep-set walls, and various structures, including Turkish foundations on wooden piles and a small tiled room (1.10 m square), pierced at its centre and evidently a latrine, lay over and around the remains of the church's staircase-vault.

Although shallow concrete footings for timber construction did little damage to Byzantine levels, very great damage was done by the large number of pits, open or stone-lined, shallow or deep, for quarrying or refuse or storage, with which the whole site was riddled.

Pits are of various categories, some being simply robber-pits left after the extraction of stone or brick, their contents giving a terminus ante quem for the date of the robbing (e.g., pit E); others being pits simply dug into earth or rubble (e.g., pit A); yet others being carefully constructed, stone-lined affairs, cut into earth or rubble or even into masonry (e.g., pit K). The contents of the pits are discussed by Dr. Hayes in volume 2, but perhaps a list of some of the principal pits, arranged in chronological order, would be useful here. The letters that were assigned to them during excavation have been retained and only indicate the order in which they were dug. The listing indicates, respectively, the date of fill, the letter designation, and the level number and grid location.

- ca. 1500. Pit J. Level 553 (S/12-13).
- ca. 1500 (?+). Pit C. Level 65 (L/8).
- ca. 1525-50. Pit A. Level 178 (M/15).
- ca. 1525-50 (?+). Pit M. Level 1268 (TU/19-20).
- Mid-16th c. Pit K. Levels 425-433 (R/13).
- Mid-16th c. (?+). Pit L. Level 1404 (aa/23).
- ca. 1570-90. Pit F. Level 507 (U/12).
- ca. 1570-90. Pit H. Level 516 (T/12).
- Late 16th c. Pit O. Level 1436 (bb/16).
- ca. 1600+. Pit D. Level 64 (L/8).
- ca. 1600+. Pit E. Level 230 (0/12-13).
- ca. 1600-25. Pit B. Level 179 (M/15).
- ca. 1600-25. Pit I. Level 990 (X/12), pl. 86.
- ca. 1625-50 (?). Pit G. Level 893 (W/12).
- ca. 1625-50. Pit N. Level 415 (ST/11).

Very substantial timber-laced concrete foundations ca. 2.0 m thick were constructed in the south-west corner of the nave, against the great Byzantine foundation,

THE STRUCTURES

which the Turkish superstructure must partly have utilised (pl. 36). The method of construction was to lay an east-west row of timbers (rectangular section, average 0.10 m x 0.15 m, and 0.20 m apart), to lay immediately above it a similar row of north-south timbers, to pour 0.50 cm of concrete, and then to repeat the two rows of timbers and the concrete. The concrete contained a

small amount of brick dust. Whether the foundations were set on vertical piles was not determined.

To the north of the above are shallow, timber-laced foundations running north and turning west, with post-holes for piles (set ca. 0.45 m apart) observable where the wall turns, and where it met the northern great foundation.

Chapter Three

THE STRATIGRAPHY

R. M. HARRISON

Introduction

EXCAVATION was, as far as possible, carried out by 4 x 4- or 4 x 9-metre trenches with 1-metre baulks, within the 5-metre grid. Trenches in the first and second seasons served to define the extent of the church and the depth and character of the stratification. Levels (layers) were removed in strict sequence and numbered separately for each trench, and this separation has been retained. With the exception of pits, which could in general be clearly defined, no attempt has been made to conflate levels with similar levels in nearby trenches. In view of the complexity of the stratification and of the novelty and importance of much of the material, it has seemed best to present the levels as excavated, preserving contexts of recovery. Conflation would have reduced the number of levels and section-drawings and made for simplicity; it would, however, have weakened their validity and introduced an area for error.

The excavation was carried out under rescue conditions, at speed and with generous but inevitably inadequate resources. Although the objective was always to remove one level completely before beginning the next, sometimes this was not fully done, with the result that the underlying level, as recorded, included a cer-

tain amount of later ("intrusive") material, and similarly there were many imperfections in the recording—in trench-notebooks, catalogues, and section-drawings. These imperfections should not, however, detract from the general picture.

As levels are not to be conflated, it has seemed useful to present them in a table, supported by section-drawings (figs. A-H). The tabular form makes it possible to describe the layer (mortar, earth, clay, etc.), to add the dates suggested by the pottery and any coins, and to record the presence or absence of mosaic, painted plaster, inlay, glass. Levels are numbered serially, but this does not correspond to the order in which they were dug; the order in which they appear below is based upon the grid, alphabetically westwards and, within each alphabetical line, from north to south numerically. The order in which they are presented in each trench or baulk does correspond to the order of removal; but a glance at the site-plans in successive preliminary reports will show that, whereas different parts of the site were dug simultaneously, a baulk between two trenches of one season might not be removed until the following year.

Key to Tabulated Levels List

LEVELS are numbered serially 1-1471. Location is generally by grid-reference (L/13-14), occasionally by description (underpass cutting, west face; narthex sector B). M/9-10b. is the baulk between trenches M/9 and M/10-11; as OP/16-17b. could refer to either of two baulks, the letters EW (east-west) are added, to indicate the baulk between OP/16 and OP/17. After the location, the character of the fill (mortary rubble, sand, clay) is briefly given.

The date which follows is that of the context, as in-

dicated by the pottery. R = Late Roman (roughly to early seventh century), B = Byzantine, T = Turkish, e, m, l = early, middle, and late, respectively. 2/4, 3/4 = second quarter of, third quarter of, as e.g., 3/4 11 = third quarter of the eleventh century. "10-12" means material from the tenth through the twelfth century. "10/11" means material from the tenth/eleventh-century borderline. "10+12" means material of the tenth and material of the twelfth century (not necessarily continuous). Intrusive material is placed in brackets,

THE STRATIGRAPHY

as m 7(+10), meaning mid-seventh, with a small amount of intrusive tenth. N.D. = no date; N.P. = no provenance.

In the fifth column coins are listed, the date of the most recent (or only) example in a given level being followed by its catalogue number in brackets; the catalogue-numbers of other coins in that level are given in a footnote.

There follows a column in which the presence or absence or various categories of material, with a crude indication of quantity, is shown, as follows:

M = mosaic in large quantities, m = mosaic in

small quantities; similarly P and p, I and i, and G and g indicate large and small quantities of painted plaster, inlay, and window glass, respectively.

Finally, there is a reference to any section-drawing on which a particular level appears.

An asterisk after a level-number indicates that the context is thought to be securely Roman or Byzantine. Byzantine material from these levels may thus be assumed to have been found as fallen, lost, or discarded. Church-material in levels without an asterisk may have been considerably disturbed, and perhaps moved, in the Turkish period.

TABULATED LEVELS LIST

Number and grid reference	Description of level	Pottery	Coins	Other†	Section
NW SECTOR					
1 Sounding 'A'	Dark earth	19-20	1909 (A1052)		
2 Sounding 'A'	Dark earth beneath 1	11/12 + 15/16			
3 Sounding 'A'	Light rubble	~ 18/19			
4* Sounding 'A'	Pit	~ 10/11			
5* Sounding 'A'	Grave	B (10-11?)		p	
6 Sounding 'A'	Dark earth	11 (+T)	498-512 (41)		
VALENS AQUEDUCT					
7 Sounding 'B'	Black earth & rubble	16			
8* Sounding 'B'	Below 4.50 metres	~ 4			
UNDERPASS CUTTING					
9	Mixed, from bulldozing	B & T			
10 West face	Pit	18-19			
11* West face	Drain-fill beneath clay	3-4+			
12* West face	Clay near drain 11	R			
13* West face	Hypogeum(?)	$\frac{2}{2}$ 12	543-65 (167)		
14 NW sector	Pit in N face (W end)	18-19			
15 NW sector	Well in W face (N end)	$\frac{2}{2}$ 18		i	
16 N sector	Pit	~ 15/e 16			
17 N sector	Well	18			
18* East face	Brown fill (robbing of great barrel-vault packing)	10-11			

*A level-number thus marked denotes an intact pre-Turkish context

†This column registers mosaic (M), inlay (I), painted plaster (P), and window glass (w); lowercase indicates small quantities

Number and grid reference	Description of level	Pottery	Coins	Other	Section
UNDERPASS CUTTING					
19* East face	Fill of great barrel-vault	10-11			
20* East face	Rubble in great barrel-vault	10			
21* East face	Foundation trench beneath Turkish foundation (Ibrahim Paşa Hamamı)	10-11			
22* East face	Fill of drain, S side Turkish foundation	R-B			
23* E/8	Clay beside sarcophagus	$\frac{1}{2}$ 4?			
CHURCH EAST END (IN UNDERPASS)					
24 H/14	Above apse-foundation	12-13 (+16)			
25* H/16	Within foundations	R			
26* H/17-18	Beside church-foundations	10-11			
27* H/18	Beside church-foundations	7			
28 J/10-13	W face underpass, above apse foundation	19			
29* J/12	Black clay beside apse-foundation	5-6			
30 J/12	White mortary layer, below 29	-			
31* J/12	Clay, beneath 30	Hellenistic-R			
32* J/15	Black earth	11			
33* J/15	Brown earth beneath 32	R + 10-11			
34* J/15	Beneath 33, above drain-cover	R?			
35* J/15	Beneath drain-cover	5-6			
36* J/15	Drain-fill	$\frac{1}{2}$ 6			
36A* J/19	Drain-fill	-			
CHURCH MAIN EXCAVATION					
37 K/9-10	Unrecorded	13?			

38	K/11-12	Mixed dark packing of modern drain	e 16	i
39	K/11-12	Light mortar	16	
40	K/12-13.b (EW)	Light mortar, with some 38	-	
41	K/12-13.b (EW)	Light mortar	-	m
42	KL/12-13.b (NS)	Black earth	16	
43	KL/12-13.b (NS)	Unrecorded	-	
44	KL/12-13.b (NS)	Light earth	z 15/e 16	
45	KL/12-13.b (NS)	Light mortar	B (+T)	i
46	K/12	Fill around lamp-post socket	-	
47	K/12	Fill around lamp-post socket	B-mod	i
48	K/12	Fill around lamp-post socket	e 13 + 19	
49	K/13-14	Dark earth	-19	i
50	K/13-14	Mortary rubble	B (+ 15)	i p
51	K/13-14	Light earth in W	B (+ T)	i M
52	K/13-14	Yellow earth	z 15	i
53	K/13-14	Yellow clay beneath floor	10-11 (+T)	
54	K/14-15.b (EW)	Dark fill	z 15	i
55*	K/14-15.b (EW)	Unrecorded	10-11	I M
56*	K/14-15.b (EW)	Well-shaft packing	10-11	i M
57	K/15-16	Black earth	z 15	i
58	K/15-16	Mortary rubble	z 15	i
59	K/15-16	Pit cut into 58	z 15	i m
60	K/17	Mortary rubble	z 15	
61	General area KM	Unstratified	B + T	I m
62	L/8	Dark earth	z 19/e 20	
63	LM/8.b (NS)	Black earth	B-mod	
64	LM/8.b (NS)	Pit D (partly overlying 65)	z 16	
65	LM/8.b (NS)	Pit C (extending into L/8)	z 15	
66	L/9-10	Dark earth	B + mod	

Number and grid reference	Description of level	Pottery	Coins	Other	Section
CHURCH MAIN EXCAVATION					
67 L/9-10	Pit outside doorway	Modern			
68 L/9-10	Sand	-			
69* L/9-10	Clay	B			
70 L/10-11.b (EW)	Dark earth	-			
71 L/11-12	Dark earth	L 17/e 18		i	2
72 L/11-12	Light earth	-e 18			2
73 L/11-12	Pit	-19		i	3
74 L/11-12	Pit	L 16?			
75 L/11-12	Carbon deposit in N (pit?)	L 16?		i	
76* L/11-12	Heavy clay	B			3
77 L/11-12	Light earth	-Mod			
78 L/11-12	Sand	-			3
79 LM/11-12.b (NS)	Mixed (bault collapse)	L 17			
80 L/12-13.b (EW)	Black earth	-17		i	
81 L/12-13.b (EW)	Light earth	L 16/e 17			
82 L/12-13.b (EW)	Light earth	L 15-16			
83 L/12-13.b (EW)	Heavy mortar	18		i	
84 LM/12-13	Unstratified	15-16 (+)		I M w	
85 L/13	Dark earth	-			
86 L/13	Light earth	B + 16-17		i m	
87* L/13-14	Rubble	L 12-13		i M	1
88 L/13-14	Yellow earth	11-12		i M	
89 L/13-14	Yellow clay on floor in NE	10-11 (+14?)	976?-1030/35 (819)		
90 L/13-14	Beneath floor-level	L 15			
91 L/13-14	Grave in crypt	-			

92*	L/14	Sounding in crypt	m 5		
93	L/14-15	Earth	19-mod		1
94	L/14-15	Mortary rubble	B+15+16		IIMP 1
95	L/14-15	Pit in centre, dug into 94	L 15		i m
96	L/14-15	Pit in SE	L 15		i
97	L/15-16.b (EW)	Dark earth	18-19		i
98	L/15-16.b (EW)	Rubble	L 15		
99	L/15-16.b (EW)	Rubble	B(+T)		M
100	L/15-16.b (EW)	Clean earth	L 15	1143-80 (863)	i M
101	L/15-16.b (EW)	Clean rubble	L 15		i
102	L/16-17	Dark earth	-Mod		1
103	L/16-17	Mortary rubble	L 15-16 (+18)		1
104	L/16-17	Pit in N	L 15		
105	L/16-17	Rubble in E	L 15-16		
106	L/16-17	Clean rubble	L 15		i 1
107	M/7-8	Unstratified	-		
108	M/7-8	Topsoil	e T + mod		
109	M/7-8	Light mortary rubble	L 16-17		4
110*	M/7	Mortary fill with greenstone chips	-12-13		4
111*	M/7	Dark earth over & beside EW wall	LR-12		4
112*	M/7	Beside & beneath drain in NE	e 6		4
113	M/8	Black earth	-		4
114	M/8	Mortary fill, beneath 109	16	512-18 (61)	
115	M/8	Probe to 2.50 m. beside Turkish foundation	$\frac{2}{2}$ 16		
116*	M/8	Beneath 115	12-13		
117*	M/8	Beneath 116	LR + B		
118	M/8-9	Winter 64/65 rainwash (mostly Pit C?)	15		
119	M/9	Dark earth	T		4

Number and grid reference	Description of level	Pottery	Coins	Other	Section
CHURCH MAIN EXCAVATION					
120 M/9	Pit in NW	16 (+12)		i	
121 M/9	Pit in NE	16-17			4
122* M/9	Light mortary rubble	12			4
123 M/9	Brown stony earth beneath 122	1 15			
124 M/9	Light mortary rubble	em 12 (+T)		i	4
125* M/9	Drain-fill	1 10-11			4
126 M/9	Dark earth in NW	12?			
127 M/9-10.b (EW)	Dark earth	-			
128 M/9-10.b (EW)	Mortary rubble	-			
129 M/9-10.b (EW)	Unrecorded	-			
130 M/10-11	Topsoil	18+			
131 M/10-11	Mortary rubble beneath 130	-			
132 M/10-11	In SE corner	16-17+	c295-99 (3) 1860/61 (A1051)		
133 M/10-11	In square room, topsoil	Mod			
134 M/10-11	In square room, beneath 133	1 19/e 20			
135 M/10-11	In square room, sand to E	1 19/e 20			
136 M/10-11	In square room, rubble earth	m 17			
137 M/10-11	In square room, beneath N & S walls	m 17			
138 M/10-11	Topsoil	-Mod			
139 M/10	Topsoil (E end N aisle)	B-mod			
140 MN/10-11	Mortary rubble in NS corridor	-19/20		i	
141 MN/10-11	Mortary rubble in NS corridor beneath 140	17			
142 MN/10-11	Earth beneath 141	17		i	

143	MN/10-11	Earth beneath 142	16-17	1481-1512 (A1043) 1520-66 (A1046)	
144	M/11-12.b (EW)	Black earth	18	i	6
145	M/11-12.b (EW)	Burnt layer	18		6
146	M/11-12.b (EW)	Beneath 145, yellow sandy fill above floor	-		6
147	M/12	Topsoil	19-20		6
148	M/12	Pit	$\frac{2}{2}$ 17	i	
149	M/12	Mortary rubble	B + T?		6
150	M/12	Mortary rubble	$\frac{2}{2}$ 17		
151	M/12	Pit	-		
152	M/12-13.b (EW)	Black earth	-Mod		6
153	M/12-13.b (EW)	Rubble	17		6
154	M/12-13.b (EW)	Rubble	15/16 (+B?)		6
155	M/13	Dark earth with burning	17-19		5,6
156	M/13	Disturbed mortary rubble	17/18	i	5,6
157	M/13	Pit in N	17/18		
158	M/13	Mortary rubble to N above "floor"	m 16	i	
159	M/13	Rubble in S below "floor" level	18-19		
160	M/13-14.b (EW)	Topsoil	R-mod		6
161	M/13-14.b (EW)	Pit	16		
162*	M/13-14.b (EW)	Beneath 161	e B		
163*	M/13-14.b (EW)	Rubble	R + B?	i w	
164	M/14	Topsoil	19-20		7
165	M/14	Mortary rubble	e 16+	i M p	7
166	M/14	Hard plaster floor in NE	-		
167	M/14	Clay beneath floor	-		
168*	M/14	Fill above grave	5+	i m	
169*	M/14	Pit in floor (with inlaid column)	12/e 13 (+R)	I m	

Number and grid reference	Description of level	Pottery	Coins	Other	Section
CHURCH MAIN EXCAVATION					
170 M/14	Unstratified	16			
171 MN/14.b (NS)	Topsoil	-Mod			
172 MN/14.b (NS)	Rubble	B + 16-17		m	
173 M/14-15.b (EW)	Topsoil	B + T			7
174 M/14-15.b (EW)	Pit	-			
175 M/14-15.b (EW)	Mortary rubble	B + 16-17			7
176* M/14-15.b (EW)	Mortary rubble	m ² B			
177 M/15-16	Dark earth	-Mod			7,8
178 M/15-16	Pit A	$\frac{2}{4}$ 16	1520-66 (A1045)		8
179 M/15-16	Pit B	e 17			8
180 M/15-16	Well	Mod			
181 M/15-16	Rubble	16-17		M	7
182 M/15	Unrecorded	-			
183* M/15	Make-up of plaster floor	6 (+11)		i m	7
184* M/15	Dark clay in NE	$2\frac{1}{4}-\frac{1}{2}$ 5		i	7
185* M/15	Dark clay beneath 184	$2\frac{1}{4}-\frac{1}{2}$ 5		m	7
186* M/15	Grave under E baulk	5-6?		i m	7
187 MN/15.b (NS)	Topsoil	Mod + e T	1204-61 (886)		
188 M/16	Topsoil	-			
189 M/16	Mortary rubble	B + 16			7,8
190 M/16	Mortary rubble	R - e B (+16)			
191* M/16	Mortary clay, against nave wall	$\frac{1}{2}$ 6 (+B)			

192	M/17	Topsoil	<i>e</i> 17 (+mod)	7
193	M/17	Rubble in N	16-17	7
194	M/17	Rubble in S	Mod	7
195	M/17	Rubble beneath 194	-	7
196	M/17	Beneath 195	19	7
197	NO/10-11.b (NS)	Dark earth	-Mod	
198	N/11-12.b (EW)	Dark earth	-Mod	
199	N/11-12.b (EW)	Dark earth	-Mod	
200	N/12	Dark earth	Mod + <i>e</i> T	
201	N/12	Rubble	16-17 (+Mod)	
202	N/12	Rubble	1 16	
203	N/12-13.b (EW)	Topsoil	-Mod	
204	N/12-13.b (EW)	Rubble	1 15/ <i>e</i> 16 (+18/19)	
205	N/13	Black earth	Mod	
206	N/13	Rubble	1 16/ <i>e</i> 17	i 379-83 (18) 603-10 (269)
207	N/13	Unstratified	T + B	
208	N/13-14.b (EW)	Topsoil	-Mod	
209	N/13-14.b (EW)	Rubble	- <i>e</i> 16	
210	N/14	Topsoil	Mod	
211	N/14	Pit in NW	16-17?	
212	N/14	Rubble	-	
213*	N/14	Niche-fill	-13	m
214	N/14-15.b (EW)	Topsoil	-Mod	
215	N/14-15.b (EW)	Dark earth	-	
216	N/15	Dark earth	18 + Mod	i
217	N/16	Including fallen floor mosaic	<i>e</i> B + 16-17	i m w
218	N/16-17	Black earth	Mod	
219	N/16-17	Rubble	16	
220	N/16-17	Rubble	R (+T)	i

Number and grid reference	Description of level	Pottery	Coins	Other	Section
CHURCH MAIN EXCAVATION					
221 N/16-17	Well	18 (+?)			
222 O/10-11	Black earth	19-20			10
223 O/10-11	Light earth in N	B + mod			10
224* O/10-11	Black earth (drain)	B (?12+)		I	10
225 OP/10.b (NS)	Unstratified	-Mod			
226 O/11-12.b (EW)	Unstratified	-			
227 O/12-13	Black earth	Mod			
228 O/12-13	Pit in masonry	$\frac{2}{2}$ 15			
229 O/12-13	Dark rubble	$\frac{1}{2}$ 17 + 18 (+Mod)			
230 O/12-13	Pit E	$\frac{1}{2}$ -m 17			
231 O/12-13	Very black earth	e 17			
232 OP/11-12.b (NS)	Dark earth	Mod			
233 OP/11-12.b (NS)	Mixed	$\frac{2}{2}$ 17 + 1 19			
234 OP/13-14.b (NS)	Unstratified	-Mod (+R)			
235 O/13-14.b (EW)	Unstratified	T - mod			
236 O/14-15	Dark earth	19-20		i	9
237 O/14-15	Rubble	R + B (+19)	976(?) - 1030/35 (818)	i m	0
238 O/14-15	Rubble in passage	B (+15-16) (+18-19)	1143-80 (866)	i w	9
239 O/14	Unstratified	-1 19+			
240 O/15	Unstratified	-			
241 OP/15.b (NS)	Dark earth	-Mod		i	

242	OP/15.b (NS)	Light fill	5-6 (+12? 16-17?)	
243	OPQ/15-16.b (EW)	Black earth	-Mod	
244*	OPQ/15-16.b (EW)	Mortary fill	6+ (+B)	
245*	OPQ/15-16.b (EW)	Light mortary fill	?12	
246	OPQ/15-16.b (EW)	Pit beside ambo-foundation	$\frac{1}{2}$ 17	6c (A944)
247	OPQ/15-16.b (EW)	Dark mortary fill beside ambo foundation	-19	
248	OPQ/15-16.b (EW)	Turkish floor	6 (+ 1 16)	
249	OPQ/16	Dark earth	-Mod	1909 (A1053)
250	OPQ/16	Lighter fill in E	B (8-9?) -mod	
251*	OPQ/16	Mortary fill	1 5-6	
252	OPQ/16	Rubble in passage	e 6 (+17)	543-65 (169)
253*	OPQ/16	Marble chips & clay packing outside passage	e 6	
254*	OPQ/16	Clay	LR-6(+)	
255	OPQ/16	Turkish foundations	$\frac{2}{2}$ 16- $\frac{1}{2}$ 17	
256	OPQ/16	Sand & clay in SE	$\frac{2}{2}$ 5 (+ mixed to T)	
257	OP/16-17.b (EW)	Turkish floor	1 6-7	
258*	OP/16-17.b (EW)	Light layer	5-6?	
259	OP/16-17.b (EW)	Unrecorded	-	
260	OP/17	Topsoil	-19/20	
261*	OP/17	Light mortary rubble	e 6	518-27 (76)
262*	OP/17	Marble chip fill, S side of nave	1 6-7	383-95 (27)
263	OP/17	Turkish floor	-	
264	OP/17	Mosaic tesserae	-	m
265*	OP/17	Marble chip fill	e 6	
266	OP/18-19	Black earth	-Mod	
267	OP/18-19	Dark mortary fill	1 19/20	

Number and grid reference	Description of Level	Pottery	Coins	Other	Section
CHURCH MAIN EXCAVATION					
268 P/10	Dark earth	B-mod			10
269* P/10	Dark fill between walls in W	e B (?8)			
270* P/10	Pit between walls in W	10			
271 P/11	Dark earth	-			
272 P/11	Dark earth beneath 271	e 20			
273 P/11	Dark earth fill to E	e 20			
274 P/11	Under tile-floor, beneath 273	c. 1900+			
275 P/12	Pit in E	$\frac{2}{2}$ 15 (+B)		m p	10
276* P/12	Rubble in W	R + B		i	
277* P/12	Black earth	10/11 + 12			10
278 PQ/12-13	Unrecorded	-			
279 PQ/11.b (NS)	Black earth	Mod			
280 P/12-13.b + PQ/12.b	Mixed, over N nave-foundation	-Mod			
281 P/14	Mixed, with rubble	-19/20			10
282* P/14	Earth with clay	R + B (?12)			10
283* P/14	282 & 284 unseparated	6 + B			
284* P/14	Clay	5 - 6			10
285* P/14	Clay	4			10
286 PQ/15	Topsoil	-Mod			
287 PQ/15	Disturbance in 286	Mod			
288 PQ/15	Pit	e 17			
289 PQ/14-15	Pit in NW	1 19/e 20			
290 PQ/14-15	Unrecorded	-	751-69(?) (463)		
291 PQ/14-15	Mortary fill, S of nave-foundation	1 5/e 6 (+e 13)			

292*	PQ/14-15	Robber-pit	6 (+12-13)	498-512 (64) 603-10 (260)
293	PQ/14-15	Marble chip fill	6 (+ -17)	
294	PQ/14-15	Light earth	-	
295	Q/11-12	Black earth	-19/20	m 12,15
296	Q/11	Black earth in stairwell	Mod	
297	Q/11	Edges of stairwell	18-19?	
298	Q/11	Removal of Turkish wall	16 + ?18/19 -1 19	
299	QR/11.b (NS)	Unrecorded	R- 1 16	
300*	QR/11.b (NS)	Topsoil	-1 12/e 13	
301	QR/11.b (NS)	Unrecorded	12 + 16/17	
302*	QR/11.b (NS)	Light mortary fill	e 13	
303	QR/11.b (NS)	Dark fill under 302	-	
304*	QR/11.b (NS)	Dark fill	e 13	
305	QR/12.b (NS)	Unrecorded	1 17/e 18	
306*	QR/12.b (NS)	Removal of baulk	e 13	
307	Q/12	Mixed rubble	e 16 (+17/18)	
308*	QR/12	White mortary fill	e 13	
309*	QR/12	Dark fill beneath 308	e 13	1195-1203 (878)
310*	QR/12	Burnt layer	1 10-11	
311	QR/12	Light mortary fill beneath 310	-12 (+16)	
312	QR/12	Mixed earth	5-6 (+1 16/e 17)	
313	QR/12	Yellow clay	-	
314*	QR/12	Dark clay beneath 313	3-4	e.295-98 (2)
315*	QR/12	Dark clay	1 4/e 5-5/6	751-69(?) (464)
316*	QR/12	Black clay	3-4?	
317	QR/12	Black clay	-	
318	QR/12	Brown clay, beneath 313	1 17 (+ mod)	
319*	QR/12	Mixed dark fill beneath 318	1 3/e 4	367-75 (15)
320*	QR/12	Brown fill beneath 318	4-5 (+8+)	

Number and grid reference	Description of level	Pottery	Coins	Other	Section
CHURCH MAIN EXCAVATION					
321 QR/12	Yellow-brown earth	-			
322* QR/12	Fill of construction-trench	e 6 (+12)			
323* QR/12	Light compact mortary fill	4-5			
324 QR/12	Brown clay beneath 315	-			
325 QR/12	Dirty yellow clay	-			
326 QR/12	Yellow sand beneath 325	-			
327* QR/12	Secondary wall	R?			
328* QR/12	Early wall	1 4/e 5			
329* QR/12	Unstratified	-8			
330 Q/12-13	Dark earth	Mod			
331 Q/12-13	Mortary rubble	16-17			
332 Q/12-13	Rubble	13 + 1 15		i	12, 15
333 Q/12-13	Dark earth in N	-			
334* Q/12-13	Black fill beneath 332	1 11/12			12, 15
335* Q/12-13	Light layer beneath 334	$\frac{2}{2}$ 5- $\frac{1}{2}$ 6			
336 QR/13	Unrecorded	$\frac{2}{2}$ 16			
337* QR/13	Unrecorded	e. 11			
338* QR/13	Dark fill	8-9? + e 11+			
339* QR/13	Mixed mortary fill	11			
340* QR/13	Dark clay	R			
341* QR/13	Lighter clay	$\frac{2}{2}$ 5	543-65 (170) 886-912 (708)		
342 QR/13	Brown earth and rubble	-			
343 QR/13	Yellow clay	-			

344*	QR/13	Dark clay	R - 5/6?		
345	QR/15-17.b (NS)	Black fill	6 + 7 17/18		
346*	QR/15-17.b (NS)	Marble chip fill	e 6		
347	QR/15-17.b (NS)	Shallow pit in N	-		
348	QR/15-17.b (NS)	Mortary rubble in passage	-19		
349	QR/15-17.b (NS)	Stone pavement	-		
350*	Q/15-17	Turkish floor?	R-7		
351	Q/17	Black earth	-		
352*	Q/17	Marble chip fill	5/6		
353	Q/17	Mortary fill	-		
354	Q/18	Black earth (E of electric cable)	6 + 7 17/18		
355	Q/18	Marble chip fill	-	1688 (A1047)	i p
356	Q/21-22	Surface rubble	-Mod		
357	Q/21-22	Well in NW	-Mod		
358	Q/21-22	Pit in centre	7 18/e 19		m
359*	Q/21-22	Light mortary fill	-13		
360*	Q/21-22	Brown fill to S	-13/14		
361	R/9-11	Topsoil	B-mod		11
362	R/9-11	Tile-fill in N	e 18		11
363*	R/9-11	Dark fill	$\frac{2}{2}$ 12		11
364*	R/9-11	Dark fill	7 12/e 13		11
365*	R/9-11	Mixed dark fill	$\frac{2}{2}$ 12		11
366	R/9-11	Mixed light mortary fill in aperture in church wall	-		
367	R/9-11	Dark earth beneath 362	7 16 + c. 1200		11
368	R/9-11	Dark earth in centre W	17	1143-80 (864) 1520-66 (A1044)	
369	R/9-11	Dark fill beneath 371	$\frac{1}{4}$ 16 (+ c. 1200)		11

Number and grid reference	Description of level	Pottery	Coins	Other	Section
CHURCH MAIN EXCAVATION					
370* R/9-11	Light mortary fill	2 12+			
371* R/9-11	Light mortary fill in NE	2 12	6c (A956)		
372 R/9-11	Mixed soil & sand	2 12/e 13 (+16-17)			11
373 R/9-11	Yellow sand	$\frac{2}{2}$ 12 (+T)			11
374 R/9-11	Yellow sand)	-			11
375 R/9-11	Stones) "Well" packing	-			11
376* R/9-11	Yellow sand)	$\frac{2}{2}$ 12			11
377 R/9-11	Shallow pit in S	16-17			
378 R/9-11	Lining of pit 377	$\frac{2}{2}$ 16+			
379* R/9-11	Mortary fill	2 12+			11
380* R/9-11	Mortary fill	12			11
381* R/9-11	Mortary fill	$\frac{2}{2}$ 12			11
382 R/9-11	Mortary fill	12 (+18-19)			11
383 R/9-11	Lining of "well"	2 R + 12 (+19)			11
384* R/9-11	Dark fill beneath 369	$\frac{3}{4}$ 12	518-27 (83) 813-20 (609) 830/31-42 (647)		11
385* R/9-11	Brown fill beneath 384	$\frac{1}{2}$ 12 (+R-8)			
386* R/9-11	Dark fill beneath 365	8 (+ 2 12)			11
387* R/9-11	Rough wall in SE, over 386	$\frac{3}{4}$ 12			
388* R/9-11	Continuation of 387	$\frac{3}{4}$ 12			

389*	R/9-11	Dark earth, beneath 387	l 11+		
390*	R/9-11	Wall of drain	8?		
391*	R/9-11	Light mortar fill beneath 385	8 + 10 (or 12?)	741? (460)	11
392	R/9-11	Mixed dark fill beneath 391	-12 (+19)	603-10 (A1005)	11
393	R/9-11	Light mortar fill over 394	-	582-602 (234)	
394*	R/9-11	Clay in NE	m 5	330-5 (5,6) 383-95 (24)	
395*	R/9-11	Stone and clay structure	$\frac{1}{2}$ 5 (+B)	c. 725-32 (448) ¹	
396*	R/9-11	Light mortar fill against 395	8		
397*	R/9-11	Dark earth fill	8	330-5 (13)	11
398*	R/9-11	Thin band of light fill	10		11
399*	R/9-11	Dark earth beneath 398	8 (+12)	330-5 (12) 741? (461)	11
400*	R/9-11	Rough wall in SW	7		11
401	R/9-11	Mortar layer	-		11
402*	R/9-11	Dark clay	l 4-5	330-5 (11, A893) 4c (A910)	
403*	R/9-11	Dark clay	l 4-5 (+B)		
404*	R/9-11	Dark clay over 402 & 403	LR + 12	4c (A909) 5c? (A936)	11
405*	R/9-11	Brown clay under 401	$\frac{1}{2}$ 6	543-65 (168)	
406*	R/9-11	Brown clay under 401	6-7 (+10/11)		
407*	R/9-11	Mixed earth and sand	12		
408*	R/9-11	Darker mixed earth	m 12+		
409*	R/9-11	Clay beneath 408	$\frac{2}{2}$ 4/ e 5		11
410*	R/9-11	Drain-fill	e 12	577/8 (213)	11

¹1, 7-9, 20, 23, A896, A911-913 also in this level

Number and grid reference	Description of level	Pottery	Coins	Other	Section
CHURCH MAIN EXCAVATION					
411 North side grading	Unstratified	12 + 17+ -mod	1092-1118 (850) ²	i	
412 North side grading O/9	Unstratified material over 413	1 16 (+ 1 12 + 17)			
413 North side grading O/9	Pit	1 17/e 18	4c (A899) c. 735-41 (457)		
414 North side grading Q/10	Pit	-			
415 North side grading ST/11	Fill of cellar (Pit N)	m 17		m P	
416 North side grading ST/11	Packing of cellar 415	16			
417 U/12	Fill close to NS brick wall	16			
418 R/11-12.b (EW)	Unrecorded	$\frac{2}{2}$ 12 (+ 1 15/e 16)			
419 R/12-13	Surface clearing	$\frac{1}{2}$ 17 + mod			
420 R/12-13	Dark compact topsoil	e 16-17/18			13
421 R/12-13	Light brown soil, N of Turkish wall	-			13
422 R/12-13	Removal of Turkish wall	16			13
423 R/12-13	Dark fill under Turkish wall	$\frac{2}{2}$ 16			13
424 R/12-13	Brown fill under 420	1 16/e 17 (+mod)			13
425 R/12-13	Pit fill)	$\frac{1}{2}$ 17			
426 R/12-13	Pit fill) Pit K	e 16 + em 17			

216, 240, 455, 809, A898 and A998 also in this level

427	R/12-13	Pit fill)	l 16/e 17	
428	R/12-13	Pit fill)	e 16	
429	R/12-13	Pit fill)	15	
430	R/12-13	Pit fill) Pit K	B + em 16	
431	R/12-13	Stony fill)	$\frac{1}{2}$ 16	
432	R/12-13	Dark soil)	-	
433	R/12-13	Black soil)	e 16	
434	R/12-13	Light mortary fill	$\frac{1}{2}$ 16 + l 16	13
435	R/12-13	Dark disturbance against Turkish wall	-	13
436	R/12-13	Pottery fill	l 16/e 17	
437	R/12-13	Packing of pit	m ^l 16	
438	R/12-13	Unrecorded	-	
439	R/12-13	Cleaning	B + l 15/16	
440	RS/12.b (NS)	Topsoil	B-mod	
441	RS/12.b (NS)	Unrecorded	6 + 16	
442	RS/12.b (NS)	Light mortary layer	16	
443	RS/12.b (NS)	Dark mortary layer	-12 + e 16	
444	RS/12.b (NS)	Unrecorded	-18	
445	RS/12.b (NS)	Construction trench for Turkish wall	10-11 + 16-17	
446	RS/12.b (NS)	Pit	l 16	
447*	RS/12.b (NS)	Unrecorded	l 10 (e 11?)	
448	RS/12.b (NS)	Unrecorded	11/e 12 (+ l 15/16)	
449*	RS/12.b (NS)	Unrecorded	m 7 (+10)	318-24 (10) 538-65 (181) 582-602 (252)
450	R/13-14.b (EW)	Unrecorded	$\frac{2}{2}$ 16	
451	R/13-14.b (EW)	Cleaning	-	
452	R/14-15	Dark fill	6 + 20	14

Number and grid reference	Description of level	Pottery	Coins	Other	Section
CHURCH MAIN EXCAVATION					
453 R/14-15	Light rubble	-em 16	870-79 (681)		14
454* R/14-15	Light fill	l 5-6			14
455 R/14-15	Disturbance (pit?)	-			
456* R/14-15	Marble chip fill	l 5-6			14
457 R/14	Unrecorded	10/11 + 16			
458 RS/14-15.b (NS)	Black earth	-			
459* RS/14-15.b (NS)	Light earth in S	e 6			
460 RS/14-15.b (NS)	Light fill in N	16			
461 RS/14-15.b (NS)	Unrecorded	-			
462 RS/14-15.b (NS)	Marble chip fill	-			
463 R/15-17	Unrecorded	e 6 + T			
464* R/15-17	Unrecorded	$\frac{2}{2}$ 12			
465* R/16	Floor packing	l 5/e 6			
466 R/16	Mortary rubble in passage	-			
467 R/16	Black earth beneath clay, within passage	-			
468* R/16	Sandy fill, within passage	R - 6 (+12?)			
469* R/16	Dark clay below 468, within passage	-m ^l 5			
470 R/15-17	Black earth	e 6 + l 19/e 20			16
471* R/15-17	Pit fill	e 6			
472 R/15-17	Dark fill	6 + l 16?			
473 R/15-17	Clay fill	e 6 (+ 12 + e 16)			
474 R/15-17	Light fill in W	-			
475 R/15-17	Marble chip fill	e 6 (+16)			16

476*	R/15-17	Light mortar in N	6	813-20 (606)	i w	16
477	R/15-17	Mixed packing of Turkish floor in N	-			
478	R/15-17	Continuation of 477	-			
479*	R/15-17	Light mortar in S	e 6			
480*	R/15-17	Light mortar	l 5-6		i	
481	R/15-17	Dark stony fill	-			
482	R/15-17	Black earth	-			
483	R/16	Unrecorded	-			
484	R/16	Beneath stones	B + 16	1839 (A1050)		
485*	R/16	Unrecorded	6			
486	R/18	Mixed fill	-			
487	R/18	Continuation of 486	-			
488	R/18	Pit	l 17/e 18	518-27 (122)		17
489	R/18	Marble chip fill	-l 16/17			17
490*	R/18	Clay	5-6			
491	R/19	Pit in S nave foundation	l 19			
492	R/19	Fill of "chamber" in S nave foundation	m 19+		P	
493	R/20-21	Black earth	-			18
494	R/20-21	Dark earth in N	ml 19			
495*	R/20-21	Mortar fill	e 6 + 11			18
496	R/20-21	Dark earth	e 12 + l 15/e 16			
497*	R/20-21	Dark fill	l 11	518-27 (91) 1092-1118 (895)		18
498*	R/20-21	Black fill in SE	l 10-11			
499	R/22	Dark earth	-18			
500	R/22	Tile fill in SW	l 19/e 20		i	18
501	R/22	Mortar fill	-			
502*	R/22	Disturbed mortary level in S	$\frac{2}{2}$ 12		i	18

Number and grid reference	Description of level	Pottery	Coins	Other	Section
CHURCH MAIN EXCAVATION					
503* R/22	Dark fill	6 + 7 11/e 12	711-13 (441) ³		
504 R/21-22	Unrecorded	7 15/e 16			
505 STU/12	Rubble layer	Mod			
506* STU/12	Disturbance in centre of trench	7 12/e 13			
507 STU/12	Dark fill in W (Pit F)	7 16			
508* STU/12	Below lining of Pit F	12/e 13			
509 STU/12	Stony pit in S face (over 516)	7 16			21
510* STU/12	Loose mortar fill	10+			
511 STU/12	Pit in E	12 (+17?)			
512* STU/12	Black pit-like disturbance	7 12	656-57(?) (399)		21
513* STU/12	Dark fill in SW corner	7 12			
514 STU/12	Pit in W	-			
515 STU/12	Light rubble	$\frac{2}{2}$ 12 (+T)			21
516 STU/12	Rubbly brown soil (Pit H)	7 16			21
517 STU/12	Top of Pit H packing	16+			
518 STU/12	Packing of Pit H	m 16			
519 STU/12	Black soil under 515	10 (+ e 12)	741-? (459) 886-912 (701)		
520* STU/12	Dark fill	-10	868-70 (687,688) ⁴		21
521 STU/12	Dark earth beneath tiles	8			
522* STU/12	Light mortary fill beneath 512	8-9		m	21

³33, 127, 143, 150 and A918 also in this level

⁴408, 643, 644 and A892 also in this level

523*	STU/12	Dark fill beneath 522	8-9	8-9	21
524	STU/12	Light mortary layer	$e\ 10\ (+\frac{2}{2}\ 16)$		21
525*	STU/12	Light mortary layer beneath 520	$\frac{2}{2}?\ 8$	582-602 (233)	21
526	STU/12	Demolition of Turkish wall	8 (+T)		
527	STU/13	Topsoil	$e\ 15-e\ 17\ (+mod)$		
528*	STU/13	Brown rubble	$e\ 10 + 12$		
529	STU/13	Brown rubble (pit) in E	$\frac{1}{2}\ 17$		
530	RS/14.b (NS)	Packing of Pit 529	$10 + 7\ 15/e\ 16$		
531	RS/14.b (NS)	Unrecorded	$10 + \frac{2}{2}\ (?)16$		
532	STU/13	Light mortary level	$7\ 12/e\ 13 + e.\ 1500$		
533	STU/13	Mixed fill beneath Turkish wall	16		
534	STU/13	Dark gravelly soil under 533	$10-11\ (+7\ 15/16)$		
535*	STU/13	Disturbances in 532 and 536	$\frac{2}{2}\ 12$		
536*	STU/13	Dark fill	$e\ 10\ (+\ 11/e\ 12)$	830/31-42 (666) 886-912 (693, 703)	
537*	STU/13	Dark fill in W, beneath 539	8-9 ($e\ 10?$)		
538*	STU/13	Stony fill beneath 552	8 (-?9)		
539	STU/13	Light mortary layer beneath 536	-10 (+T)	i m	
540	STU/13	Dark layer beneath 539	$e(?)10\ (+T)$	830/31-42 (645)	
541	STU/12-13.b (EW)	Topsoil	$\frac{2}{2}\ 16$	i	20
542	STU/12-13	Light mortary level	$7\ 16+$		19,20
543	STU/12-13	Light mortary level	$7\ 15/e\ 16 + 7\ 17/e\ 18$		
544	STU/12-13	Unrecorded	-9/10 ($+\frac{2}{2}\ 16$)	8c? (A1029)	
545*	STU/12-13	Dark fill	$e\ 10 + \frac{1}{2}\ 12$	870-79 (682)	19,20

Number and grid reference	Description of level	Pottery	Coins	Other	Section
CHURCH MAIN EXCAVATION					
546* STU/12-13	Fill of E aperture in N church wall	8	803-11 (553) 830/31-42 (646,673)		20
547* STU/12-13	Dark fill under 549	m 8			19
548* STU/12-13	Dark fill under 549	e 10			
549* STU/12-13	Light mortary level	10(-12)	330-35 (4)		19,20
550 STU/12-13	Mortary level	7-9 + e. 1500			20
551 STU/12-13	Top of Pit J	1 15 (+16-17)	776-78 (482)		
552 STU/12-13	Pit J beneath 551	-e. 1500			
553 STU/12-13	Pit J	e 16			
554 STU/12-13	Dark fill beneath 553 (Pit J)	e 16 (+ 1 17/e 18)			
555 STU/12-13	Dark layer beneath 550	-			
556* STU/12-13	Dark layer beneath 546	8			
557* STU/12-13	Brown earth with clay beneath 556	(e?) 8			
558* STU/12-13	Dark mixed fill	-7 (+8)		w	19
559* STU/12-13	Dark layer beneath 558	m 7	655/6 (351,398) ⁵		
560* STU/12-13	Light brown earth	m 7	5c? (A935) 518-27 (121)		19
561 STU/12-13	Mortary floor in SW	-			
562* STU/12-13	Transverse wall	7/8	4c (A908) 5c? (A934)		
563* STU/12-13	Dark layer, beneath 559	m 7	821-29 (617) ⁶	w	19
564* STU/12-13	Stony layer beneath 562	m 7	1118-43 (853) ⁷	i	19

517, 90, 110-11, 124, 146, 202, 206, 220, 232, 237-39, 249, 262, 283, 323, 341, 359, A957, A969, A1001 also in this level
628, 36, 85, 164, 179, 190, 242, 246, 259, 273, 279-82, 285, 301-02, 311, 325, 330, A958, A970, A985, A995 also in this level
730, 63, 77, 86, 100-01, 112-117, 148-49, 171, 187, 203, 207, 214, 216, 241, 295-96, 303, 403, 793, A919, A924, A942, A953, A954, A959, A982, A997 also in this level

565*	STU/12-13	Dark fill in depression in 566	-em 7	518-27 (118)	i
566*	STU/12-13	Yellow clay	c. 520-540 $\frac{2}{2}$ 6	498-512 (43) 5c (A922) 518-27 (82,144) 6c (A966,A968)	19
567*	STU/12-13	Dark fill	em 7		
568*	STU/12-13	Pit (upper level)	e 7	565-78 (217)	19
569*	STU/12-13	Pit (lower level)	l 6 (+e 6)	543-65 (174) ⁸	19
570*	STU/12-13	Dark fill around drain in NE	m? 7	6c (A967)	
571*	STU/12-13	Stones of central drain	6-7		
572*	STU/12-13	Pit on N of drain	6c	582-602 (250)	19
573	STU/12-13	Disturbed yellow sand under drain	-	491-8 (37)	
574	STU/12-13	Dark earth E of 570	-		
575	STU/12-13	Dark earth with clay	-		
576*	STU/12-13	Yellow sandy clay in sounding	LR (4-6)		
577*	STU/12-13	Cleaning	7 (+7/8)	606(?) -10 (294) 571/2 (188) 565/6 (211) 686/7 (426) ⁹	
578	STU/12-13	Doorway cleaning	-		
579*	STU/13	Beneath electric cable, mixed	$-\frac{2}{2}$ 12		
580	STU/13	Beneath 579	6 (+ 17/18)		
581	STU/13	Mortary rubble	12 + 19/20		
582*	STU/13	Light mortary layer	-e 12		
583*	STU/13	Dark loose fill	10 (+ $\frac{1}{2}$ 12)		
584*	STU/13	Light mortary fill	(m?) 12		
585*	STU/13	Dark fill beneath 584	8 + 10?		
586*	STU/13	Beneath 585	l? 8		

874, 78, 104, 125, 126, A921, A940, A941 also in this level
9276, 367, 402, A971 also in this level

Number and grid reference	Description of level	Pottery	Coins	Other	Section
CHURCH MAIN EXCAVATION					
587 STU/13-14.b (EW)	Unrecorded (in S passage)	$\frac{2}{2}$ 17			
588 S/14	Uneven dark material	7 16	695/6 (432)		
589 S/14	Depression in S	7 16			
590* S/14	Light mortary rubble	$\frac{1}{2}$ 12			
591 S/14	Unrecorded	-			
592 T/14	Dark layer	7 16			
593* T/14	Light mortary rubble	8-11	5/6c? (A937)		
594* T/13-14	Light mortary layer	7 + 11			
595* ST/14.b	Unstratified	R + B			
596 ST/14.b	Unrecorded	-			
597 ST/13-14 (+ E ext)	Dark fill, above 598	c. 1600			
598 ST/13-14 (+ E ext)	Fill of square pit	c. 1600			
599 ST/13-14 (+ E ext)	Lining and packing of square pit	10 (+ 7 16/e 17)			
600 ST/13-14 (+ E ext)	Mortary layer	10-11 (+ 16)		m	20
601* ST/13-14 (+ E ext)	Dark fill	e 10	868-70 (689) 886-912 (694)	i	20
602* ST/13-14 (+ E ext)	Light fill	e 10 + 8 (+7)		i m	
603* ST/13-14 (+ E ext)	Fine dark earth beneath 602	e 10			20
604* ST/13-14 (+ E ext)	Dark pit-fill cut into 606	8 + e 11			
605* ST/13-14 (+ E ext)	Blocking of W aperture between N & S passages	8+			
606* ST/13-14 (+ E ext)	Fine dark earth	8	641-7 (397) 659-64 (381)		20
607* ST/13-14 (+ E ext)	Charcoal beneath 608	8			

603*	ST/13-14 (+ E ext)	EW wall	9-10	
609*	ST/13-14 (+ E ext)	Light mortar earth	8	351-4 (14)
610*	ST/13-14 (+ E ext)	Light mortar fill	8	886-912 (710)
611*	ST/13-14 (+ E ext)	Mixed dark earth beneath 609	8	393-95 (21)
612*	ST/13-14 (+ E ext)	Dark earth beneath 611	e 8	
613*	ST/13-14 (+ E ext)	Light mortar level beneath 612	7	
614	ST/13-14 (+ E ext)	Drain slabs beneath 612	-	
615	U/13	W end N passage	Mod	
616*	U/13	W end N passage	6+	
617	TU/14.b (NS)	W end S passage	-	
618	TU/14.b (NS)	W end S passage	-	
619*	TU/14.b (NS)	Unrecorded	6 + 10/11	
620	TU/14.b (NS)	Unrecorded	-	
621	S/15-16	Dark earth in W	e 6 + mod	
622*	S/15-16	Dark earth in E	e 6	
623*	S/15-16	Brown mortar earth (including robber-trench)	6 + B-12	
624*	S/15-16	Brown, very mixed	e 6	
625	S/15-16	Yellow mortar fill in N	-	
626*	S/15-16	Mixed brown earth in S	e 6	
627*	S/15-16	Marble chip fill	5-6	
628*	S/15-16	Light mortar layer	e 6	
629*	S/15-16	Mixed light and dark fill in S	5+	
630	S/15-16	Mortar fill with marble chips	e 10 (+12 + 16)	
631	S/15-16	Lined pit	2 17/e 18	
632*	S/15-16	Dark clay layer	5-6	
633	S/15-16	Mortar fill between drain-walls	-16, 6 (+19)	
634*	S/15-16	Black earth beneath 633	e 12	6c (A945) 518-27 (87,88) e.725-32 (449)

Number and grid reference	Description of level	Pottery	Coins	Other	Section
CHURCH MAIN EXCAVATION					
635 ST/15-16.b (NS)	Black earth	-			
636* ST/15-16.b (NS)	Disturbance in N	6			
637 ST/15-16.b (NS)	Light earth	e 6 (+e 16)			
638 S/16-17.b (EW)	Black earth	-			
639* S/16-17.b (EW)	Light earth	e 6			
640 S/16-17.b (EW)	Dark earth	-			
641 S/17-19	Dark earth	Mod		i	
642 S/17-19	Light rubble	e 13 (+16)		i m	
643 S/17-19	Pit in N	16-17			
644 S/17-19	Unrecorded	-			
645 S/17-19	Dark clay in NW	-			
646 S/17-19	Black layer inside water channel	-			
647* S/17-18	Dark fill in S drain	7	610-41? (A1016) ¹⁰	i	
648 ST/17-18.b (NS)	Black earth	Mod			
649* ST/17-18.b (NS)	Light layer	B		m	
650* ST/17-18	Light layer	B (13-14?)			
651 ST/17-18	Light layer	-			
652* ST/17-18	Unrecorded	$\frac{2}{2}$ 12			
653* ST/17-18	Dark earth in water-channel	10-11			
654* ST/17-18	Cleaning	10-11			
655 S/19	Topsoil	Mod			

¹⁰ 50, 57, 62, 89, 119, 120, 140, 145, 147, 158, 165, 166, 172-73, 180, 193, 200, 218, 235, 261, 278, A923, A925-26, A960-65, A996 also in this level

656	S/19	Mixed layer		-Mod B + T	
657*	RS/16-17	Fill in axial passage		-10/11	
658	RS/16-17	Black earth in axial passage drain		-	
659	T/15-16	Black earth		Mod	24
660*	T/15-16	Light mortar layer		10 + 12-13	i 24
661	T/15-16	Dark layer		10-11 (+18)	m 24
662*	T/15-16	Dark layer		11-12+	
663	TU/15-16.b (NS)	Mixed earth		-Mod	
664	TU/15-16.b (NS)	Unrecorded		Mod	
665	TU/15-16.b (NS)	Light rubble, mixed with edge of pit		B + T (-18)	i
666	TU/15-16.b (NS)	Unrecorded		-12/13 + 16	
667	TU/15-16.b (NS)	Unrecorded		-	
668	T/16-17.b (EW)	Mortary rubble fill		-18-19	
669	TU/17-19.b (NS)	Unrecorded		Mod	i m w
670	TU/17-19.b (NS)	Unrecorded		B + T -17+	
671	TU/17-19.b (NS)	Unrecorded		-18	i m w
672	TU/17.b (EW)	Unrecorded		Mod	
673	TU/17.b (EW)	Pit		$\frac{2}{2}$ 16 (+17?)	i m
674	TU/17.b (EW)	Light mortar fill		m 17	i
675	T/17-18	Black earth		Mod	
676	T/17-18	Black earth in S		B + 18	
677	T/17-18	Light earth		(B + T) 19?	i m
678	T/19	Dark earth		Mod	
679	T/19	Cistern fill		Mod	
680	T/21	Dark earth		10(+?) -18	
681*	T/21	Dark earth		6/7 + 10-11	
682	T/21	Light earth		-17/18	
683	T/21	Light earth		-	
684	T/21	Mixed earth		7 6 + B + 16	

Number and grid reference	Description of level	Pottery	Coins	Other	Section
CHURCH MAIN EXCAVATION					
685 T/21	Rubby layer	7 10/e 11 + 18			
686* T/21	Dark earth	R + 10-11	821-9 (636) ¹¹		
687* T/21	Brown earth	$\frac{2}{2}$ 6 + 10 (?+)			
688* T/21	Unstratified	$\frac{2}{2}$ 6	512-18 (60) 518-27 (141) 565-78 (198)		
689 T/21	Unstratified	e 6 -16 + 18			
690 T/21	Cleaning	18 + mod			
691 U/13-14	Hardcore	B - mod		i	
692 U/13-14	Light earth	B - mod		i m	
693 U/13-14	Light earth in N	B (+16)			
694* U/13-14	Black earth in N	10-11 + e 12		i m	
695* U/13-14	Light earth in N	10 + 12			
696 U/13-14	Light earth in S	R B T			
697* U/13-14	Black earth in S	10 + 12-13		m	
698 U/13-14	Mixed fill	B + T -mod			
699 U/13-14	Dark fill	B + T			
700* UV/14	Mortar fill	7 12/e 13	821-9 (620) 830/31-42 (665) 976(?) -1030/35 (805)	i M	
701* UV/14	Dark fill	10 + 12 (+R)	615/6 (308) 976(?) -1030/35 (806) 1068-71 (840)	m	

¹¹ 67, 96, 105, 135-39, 157, 192, A927-930, A993 also in this level

702*	UV/14	Dark fill 701 continued	10 + e 12	931-44 (742) ¹²
703	UV/14	Mortary layer	-	886-912 (700) ¹³
704*	UV/14	Layer with drains	-10	803-11 (552) ¹⁴
705*	UV/13	Unrecorded	10 (+12)	
706	UV/13	Unrecorded	-	
707	UV/13.b (NS)	Unrecorded	18?	
708	UV/13.b (NS)	Unrecorded	-	527-38 (152)
709	UV/14-15.b (EW)	Unrecorded	-	
710*	UV/14-15.b (EW)	Dark earth	m 12+	
711	UV/14-15.b (EW)	Dark earth	-Mod	
712*	UV/14-15.b (EW)	Mixed dark earth	-m 12	
713*	UV/14-15.b (EW)	Brown mortary fill	B-2 12/13	512-18 (46)
714*	UV/14-15.b (EW)	Light mortary fill	10/11+	
715*	UV/14-15.b (EW)	Charcoal band	10 + 12	518-27 (84)
716*	UV/14-15.b (EW)	Dark earth with stones	10 (+ m 12)	
717	UV/14-15.b (EW)	Unrecorded	-	
718	UV/14-15.b (EW)	Cleaning	-	
719	UV/14-15.b (EW)	Cleaning	B + T -Mod	
720	U/15-16	Light mortar spill	Mixed	
721	U/15-16	Hard packed earth	-Mod	
722	U/15-16	Pit in S	17	i m
723	U/15-16	Dark earth in Pit 722	$\frac{2}{2}$ 16-17	
724	U/15-16	Hard "floor" in N	?18-19	
725*	U/15-16	Light mortary rubble	13 (+R)	m
726*	U/15-16	Pit-fill at 2.50 metres	11-12?	i m w
<hr/>				
1299, 313, 347, 352, 358, 361, 362, 363, 378, 642, 699, 739 also in this level				
13480, 551, 621 and 641 also in this level				
14247, 315, 349, 383, 388, 428, 437, 439, A1018 also in this level				

Number and grid reference	Description of level	Pottery	Coins	Other	Section
CHURCH MAIN EXCAVATION					
727 U/15-16	Pit-packing	-16/17			
728* U/15-16	Shallow pit, against W wall of church	10-11 + $\frac{2}{2}$ 12	4c (A914, A920)	m	
729 U/15-16	Dark earth over whole trench	- e 13	518-27 (71) 1204-61 (883) 1688 (A1048)	i M w	
730 UV/15-16.b (NS)	Topsoil	-Mod			
731 UV/15-16.b (NS)	Mixed light rubble	B-mod		m	
732 UV/15-16.b (NS)	Dark earth	16		i m	
733 UV/15-16.b (NS)	White mortary layer	B (+T)		i m w	
734* UV/16-17.b (EW)	Unrecorded	7 12-13 (+?)		m	
735 UV/18-19/1	Topsoil	-Mod			
736 U/17-19	Black earth	-7 19		i m	
737 U/17-19	Light earth	B + T + 19/20			
738 U/17-19	Mixed dark earth in SW	12 (+T -19/20)			
739* U/17-19	White mortary fill in NE	12-13		i m	
740* U/17-19	Unrecorded	B - 12			
741 U/17-19	Pit in W	-			
742 U/17-19	Sooty earth fill in S	B + 17 or 18			
743 UV/17.b (NS)	Cleaning	B			
744 UV/17.b (NS)	Black earth	12/13 (+T -mod)			
745* UV/17.b (NS)	Light mortar fill	7 12			
746* UV/17.b (NS)	Dark earth	11-12		i	
747 UV/17-19.b (NS)	Topsoil	Mod			
748* UV/18-19	Black fill	7 10			
749 U/21-22	Dark earth	-			

750	U/21-22	Very dark brown earth	e 20
LONG CUT IN U LINE (1964)			
751	U/-2, -1	Hardcore	Mod
752	U/-2, -1	Light brown earth	R B -18+
753	U/-2, -1	Brown earth	17 (+18-19)
754	U/-2, -1	Pit	17
755	U/-2, -1	Dark earth in N	mixed to 17-18
756	U/-2, -1	Top cistern-fill	m 17+
757	U/-1, 0	Black earth	17 (+ Mod)
758	U/-1, 0	Mortary rubble	17 (-18?)
759*	U/-1, 0	Mortary level	10-11
760*	U/-1, 0	Light mortary, below electric cable	10-11
761*	U/-1, 0	Green clay with dark earth	R + 10-11
762*	U/-1, 0	Beneath 760	10-11
763*	U/-1, 0	Beneath 762	R + m B
764	U/0-1	Hardcore	19-20
765	U/0-1	Black earth	17 19 + e 20
766	U/0-1	Mortary earth	R + 10-11 (+T)
767*	U/0-1	Yellow clay at 2 metres	5-6
768	U/1-2	Hardcore	Mod
769	U/1-2	Black earth	-
770	U/1-2	Mixed earth	10-11 + T -17
771*	U/1-2	Mixed earth	17 5/e 6 + 10-11
772	U/2-3	Hardcore	-19
773	U/2-3	Compact earth	17 18+
774	U/2-3	Pit in W	18/19
775	U/2-3	Dark earth	16-17 18
776	U/18-22	Hardcore	-Mod
777	U/18-22	Dark earth	-Mod

Number and grid reference	Description of level	Pottery	Coins	Other	Section
CHURCH MAIN EXCAVATION					
778 U/18-22	Mixed, with much from Pit 779	16/17-19			
779 U/18-22	Pit	17+			
780 U/18-22	Garden earth	19-20			
781 V/12-13	Black earth	Mod			23
782 V/12-13	Rubble and rubble-filled pit in N	12-13 (+T)		i m	23
783* V/12-13	Unrecorded	12/13			
784* V/12-13	Black earth at bottom of pit 782	12		i	
785* V/12-13	Rubble in N	-12			23
786 V/12-13	Clean rubble in S	10 + e 12 (+T)			
787* V/12-13	Light earth	11- (2/2) 12			
788* V/12-13	Dark layer	R + 10-11 + e 12			23
789* V/12-13	Lighter layer below 788	10+ (1 11/e 12)	886-912 (697)		23
790* V/12-13	Pit in NE	10+ (1 11/e 12?)			
791* V/12-13	Black earth	10 (+1 11?)	870-79 (683) 886-912 (698) 945-c.950 (796)		23
792* V/12-13	Black earth below 791	10+ 1 11/e 12	870-79 (684)		23
793 V/12-13	Cleaning	B + T			
794* V/12-13	Dark fill outside N passage doorway	8(-12?)			
795* V/12-13	Dark fill outside N passage doorway	7 + 10/11	976(?) - 1030/35 (814)		
796 V/13-14.b (EW)	Unstratified	-			
797* V/13-14.b (EW)	Light rubble	-12			25
798* V/13-14.b (EW)	Brown mortary earth	10 (+?12)			25
799* V/13-14.b (EW)	Brown mortary earth	(m?) 12			25
800* V/13-14.b (EW)	Charcoal layer with bone	-10/11			25

801*	V/13-14.b (EW)	Mixed brown soil	-12	25
802*	V/13-14.b (EW)	Mixed brown soil	10 (+12?)	25
803*	V/13-14.b (EW)	White mortary fill	$e \ B + \frac{1}{2} \ 12$	25
804*	V/13-14.b (EW)	White mortary fill	8 + ?10	25
805*	V/13-14.b (EW)	Brown fill	10/11	25
806*	V/13-14.b (EW)	Brown soil	12	25
807*	V/13-14.b (EW)	Brown soil	10	25
808*	V/13-14.b (EW)	Compact brown earth	-7 10/11	25
809*	V/13-14.b (EW)	Loose rubble	8?	25
810*	V/13-14.b (EW)	Brown earth with clay	6	25
811*	V/13-14.b (EW)	Brown earth with clay	10/11	25
812*	V/13-14.b (EW)	Brown earth with clay	10/11	25
813	V/13-14.b (EW)	Yellow earth with charcoal	-	25
814	V/13-14.b (EW)	Compact brown mortary earth	-	25
815*	V/13-14.b (EW)	Compact stony earth	8?	25
816*	V/13-14.b (EW)	Soft brown earth	8	25
817*	V/13-14.b (EW)	Loose mortary earth	5/6	25
818*	V/13-14.b (EW)	Brown mortary earth	6-7(+?)	25
819*	V/13-14.b (EW)	Charcoal band over 820	R or B	25
820*	V/13-14.b (EW)	Brown earth with charcoal	7+	25
821*	V/13-14.b (EW)	Disturbance for drain	-10	25
822*	V/13-14.b (EW)	Brown fill	6-8 (+12)	25
823*	V/13-14.b (EW)	Brown fill	-e 6 (+7-10?)	25
824*	V/13-14.b (EW)	Brown fill	-10/11	25
825*	V/13-14.b (EW)	Brown fill	6-10 (+12)	25
826*	V/14-15	Cleaning	-12	
827	VW/14	Dark earth	Mod	
828	VW/14	Light mortary layer	R(?) +T	
829	VW/14	Mortary layer	B + T -17	m

Number and grid reference	Description of level	Pottery	Coins	Other	Section
CHURCH MAIN EXCAVATION					
830* VW/14	Mortary fill in cistern	e 13		i	
831* VW/14	Lower continuation of 830	l 12/e 13		i M	
832 VW/14-15.b (EW)	Mixed earth	Mod			
833* VW/14-15	Cistern fill	m 12+	1118-43 (851)	I m p	
834* VW/14-15	Darker fill to S	$\frac{2}{2}$ 12		i	
835* VW/14-15	Dark silt over cistern-floor	$\frac{3}{4}$ 12			
836 V/15-16	Dark earth	Mod			26
837* V/15-16	Mortary layer	e 13		i m	26
838 V/15-16	Disturbance in S (lined pit)	l 16/e 17		m w	26
839 V/15-16	Top of lined pit	19(20)			
840 V/15-16	Dark layer	10 + m 12 (+T)	821-29 (619)	i M	26
841* V/15-16	840 and 842 mixed	$-\frac{2}{2}$ 12			
842* V/15-16	Black layer	10 (+11?)			
843* V/15-16	Pit	10			
844* V/16	Loose mortary layer	10-12		i	
845* V/16	Dark earth overlying pavement	$\frac{1}{2}$ 11			
846* V/16	Dark earth overlying pavement	11			
847* V/17	Dark brown earth	11	527-38 (153)		
848* V/17	Overlying pavement	$\frac{1}{2}$ 11	821-29 (623)	m	
849* V/17	Unrecorded	11			
850 VW/15-16.b (NS)	Black topsoil	Mod			

851*	VW/15-16.b (NS)	Sandy layer	$\frac{2}{2}$ 12-13	
852	VW/15-16.b (NS)	Packing of Pit 904	16 (+17+)	
853	VW/15-16.b (NS)	Trench fall, mixed	e T	
854	VW/15-16.b (NS)	Unrecorded	-	
855*	VW/15-16	Black fill	l 12/e 13	i w
856	VW/17	Black earth, brick & marble	B + mod	m w 22
857	VW/17	Brown earth and rubble	l(?) 17 (+mod)	w 22
858	VW/17	Light and dark sandy earth	11-12 (+T)	i m w 22
859	VW/17	White mortary rubble	l 12/e 13 (+18)	i m w 22
			498-512 (55) 1143-80 (861)	
860*	VW/17	Unstratified in S	10+	i
861*	VW/17	Dark layer	10 + l 12/e 13	i m 22
862*	VW/17	Darker earth in W	B-e 13	i m w
863*	VW/17	Mixed light and brown fill	10 + 12	m w
864*	VW/17	Pit in NW	10-11	e.721-e.25 (447) m
865	VW/17	Loose earth spill	10-12 (+T-mod)	
866	VW/16-17.b (EW)	Dark earth	T	
867	VW/16-17.b (EW)	Light mortary layer	12+ (16+)	
868	VW/16-17.b (EW)	Dark fill (pit?)	17	i
869*	VW/16-17.b (EW)	Dark earth	l 12/e 13	i m w
870*	VW/16-17	Dark earth	12+	m
871*	VW/16-17	Dirty mixed fill in E	-l 12/e 13	e.1060-e.65 (832) m
872*	VW/16-17	Pit fill in N	10 em 12	i
873*	VW/16-17	Black fill in E	l 12/e 13	i
874*	VW/16-17	Dark pit-fill	10-l 12/e 13	i m
875*	VW/16-17	Mixed loose fill	l 12/e 13	
876*	VW/17-18 Area	Unrecorded	$\frac{2}{2}$ 12	
877	VW/17-18 Area	Unrecorded	Mod (+12)	
878	VW/17-18 Area	Mixed light and dark earth	-	

Number and grid reference	Description of level	Pottery	Coins	Other	Section
CHURCH MAIN EXCAVATION					
879* VW/17-18 Area	Mixed light fill	B-e 12	i		
880* VW/17-18 Area	Mixed light fill	e 12?			
881* VW/17-18.b (NS)	Unrecorded	1 10/e 11 + $\frac{2}{2}$ 17			
882 V/18-19	Black earth	Mod			
883 V/18-19	Disturbance in 882	18			
884 V/18-19	Lighter earth	16			
885 V/18-19	Dark earth	1 17			
886 V/18-19	Small pit to NE	B + 17			
887 V/18-19	Brown rubbly layer	1 17			
888 V/18-19	Brown rubbly layer below 887	10-12 (+17)			
889* VW/18-19.b (NS)	Unrecorded	6			
890* VW/18-19.b (NS)	Unrecorded	1 6/e 7 (+10/11)			
891* VW/19 Area	Cleaning	10-11 + mid 12			
892 W/12-13	Mixed rubble	16-17 + Mod			
893 W/12-13	Pit G	$\frac{2}{4}$ 17			
894 W/12-13	Light mortary layer	e 17			
895 W/12-13	Lining of Pit G	12 (+17)			
896 W/12-13	Packing of Pit G	e 17			
897* W/12-13	Unrecorded	$\frac{2}{2}$ 12			
898 W/12-13	Clean mortary rubble	e 13 + 16/17 (+mod)	498-512 (49) 976(?) - 1030/35 (816)	i	
899* W/12-13	Brownish rubble beneath 898	$\frac{2}{2}$ 12		i	

900	W/12-13	Dark compact rubble	11 (+R) -18+	868-70 (678) 976(?) -1030/35 (815) 1195-1203 (879)	
901	WX/14-16	Cleaning of cistern	12 + T	i	
902	W/15-16	Topsoil	-Mod		31
903	W/15-16	Compact layer	-19		31
904	W/15-16	Pit in SE	$\frac{1}{2}$ 17	i m	31
905	W/15-16	Lower fill of Pit 904	c. 1630-1660		31
906	W/15-16	Minor pit in SW	16	m w	
907	W/15-16	Disturbed light mortar layer	16		31
908	W/15-16	Light mortar fill below 907	B - 12 (+ 16/17)	i	31
909*	W/15-16	Light mortar fill in N	2(?)12	i m w	31
910*	W/15-16	Dark fill in centre	$-\frac{1}{2}$ 13	i w	31
911*	W/15-16	Lighter fill in centre	B -12/13		31
912*	W/15-16	Light mortar rubble within cistern	m 12 2 11/e 12	i	
913*	W/15-16	Dark layer beneath 912	$\frac{2}{4}$ 5 ($\frac{1}{2}$ 12)		27
914*	W/15-16	Light mortar layer beneath 913	$\frac{2}{2}$ 12	821-29 (622)	
915*	W/15-16	Dark earth beneath 914	$\frac{2}{2}$ 12		
916	W/15-16	Cleaning	-Mod	i	
917*	W/15-16	Topsoil	e 12		27
918*	W/15-16	Pit	$\frac{2}{2}$ 12		27
919*	W/15-16	Dark brown clay	11-12		27
920*	WX/16-18.b (NS)	Bricks and mortar from fallen pier	e 6	m	
921*	WX/16-18.b (NS)	Pit	$\frac{1}{2}$ 13+		

Number and grid reference	Description of level	Pottery	Coins	Other	Section
CHURCH MAIN EXCAVATION					
922* WX/16-18.b (NS)	Dark brown earth	11-e 12	686/7 (429) 970-76(?) (800) 976(?) -1030/35 (807) 1204-61 (882)		
923 WX/16-18.b (NS)	Unrecorded	-em 12 (+16)		m	
924 WX/16-18.b (NS)	Unstratified	-1900+			
925* WX/16.b (NS)	Unrecorded	2 11/e 12			
926* WX/16.b (NS)	Contains pit	$\frac{1}{2}$ 5 (-12)			
927* WX/16.b (NS)	Unrecorded	11			
928* WX/17.b (NS)	Unrecorded	$\frac{1}{2}$ 12			
929* WX/17.b (NS)	Unrecorded	-m 12	931-44 (760)		
930* WX/17.b (NS)	Unrecorded	$\frac{1}{2}$ 12			
931* W/16-17.b (EW)	Unrecorded	$\frac{2}{2}$ 12			
932* W/16-17.b (EW)	Unrecorded	e 11+ -m 12			
933 W/16-17	Cleaning	-	498-512 (44)		
934* WX/16-17	Unrecorded	$-\frac{2}{2}$ 12		i	
935* WX/16-17	Unrecorded	a. 11			
936* W/17	Light earth	2 10/e 11 (+m 12)	976(?) -1030/35 (824)	i m w	27
937* W/17	Light earth	$\frac{3}{4}$ 12			
938* W/17	Fill of drain	8 (+ $-\frac{1}{2}$ 12)	660-68 (410)		

939*	W/17	Fill of drain	<i>e</i> 6 (+8)	m	
940*	W/17-18.b (EW)	Unrecorded	$\frac{2}{2}$ 12	1204-61 (889)	
941*	W/17-18.b (EW)	Unrecorded	11+ - <i>m</i> 12	<i>i</i>	
942*	W/17-18.b (EW)	Unrecorded	$\frac{1}{2}$ 11		
943*	W/17-18.b (EW)	Unrecorded	$\frac{1}{2}$ 10/ <i>e</i> 11		
944	W/17-18.b (EW)	Unrecorded	-		
945	W/18-19	Unrecorded	$\frac{2}{2}$ 12 + 17/18		
946	W/18-19	Unrecorded	-		
947	W/18-19	Mortary rubble	$\frac{1}{2}$ 16-17+ <i>e</i> 18+		32,37
948	W/18-19	Light brown earth	$\frac{1}{2}$ 17- $\frac{1}{2}$ 18	<i>i</i>	32,37
949	W/18-19	Stones in centre of trench	-		
950	W/18-19	Well	-12 + $\frac{1}{2}$ 15/ <i>e</i> . 1500 $\frac{1}{2}$ 18/ <i>e</i> 19	<i>i</i> m w	
951	W/18-19	Robber-trench	-		37
952	W/18-19	Stony earth	-end 15 (+ $\frac{2}{2}$ 16)		32
953	W/18-19	Dark brown earth	$\frac{1}{2}$ 11/ <i>e</i> 12 (+ $\frac{1}{2}$ 17)	<i>i</i> m w	32,37
954	W/18-19	Drain	$\frac{1}{2}$ 11/ <i>e</i> 12 $\frac{1}{2}$ 17/ <i>e</i> 18		32
955*	W/18-19	Light earth and rubble	$\frac{1}{2}$ 10/ <i>e</i> 11 + $\frac{1}{2}$ 12	m	32,37
			1118-43 (854) 1185-95 (868-75,877)		
956	W/18-19	Dark brown earth and rubble	- 17		32
957*	W/18-19	Green clay with brown sandy earth	-11/ <i>e</i> 12		
958*	W/18-19	Unrecorded	$-\frac{2}{2}$ 12	m	
959*	W/18-19	Unrecorded	<i>e</i> 12		
960	W/18-19	Unrecorded	-	<i>i</i>	
961	W/18-19	Hard packed earth	-	m w	
962*	WX/18.b (NS)	Contained burials	11 (-12+)	518-27? (A939)	

Number and grid reference	Description of level	Pottery	Coins	Other	Section
CHURCH MAIN EXCAVATION					
963* WX/18.b (NS)	Unrecorded	m 11			
964* WX/18.b (NS)	Unrecorded	em 11			
965 WX/18-19	Rubble over tile-floor	-Mod		m	
966 WX/18-19	Pocket of mortary rubble	2 17-18		i	
967 WX/18-19	Yellow rubble	$\frac{1}{2}$ 12 (+T)		i m	
968* WX/18-19	Circular marble structure	12			
969 WX/18-19	Plaster packing for marble paving of 968	-		m	
970* WX/18-19	Light rubble	B (?10)		m	
971 WX/18-19	Yellow mortary disturbance	$\frac{1}{2}$ 12 + 16+	1092-1118 (849)	w	
972* WX/18-19	Clean mortary fill	10/11 (+12)		m w	
973* WX/18-19	Mortary fill from foundations of 968	10+			
974* WX/18-19	Clean mortary level beneath 968	10+		m w	
975 WX/18-19	Mortary rubble beneath 974	-		m	
976 WX/18-19	Rubbly topsoil to W	2 17 +		W	
977* WX/18-19	Mixed earth & mortar	12			
978* WX/18-19	Dark earth over burials	12 (?+)		m	
979* WX/18-19	Dark earth over burial 86	c. 10			
980* WX/18-19	Dark earth over burial 88	12?		m w	
981 WX/18-19	Dark earth surrounding burial 92	-			
982* WX/18-19	Dark earth surrounding burial 93	2 11/-12			
983 WX/18-19	Mixed charcoal & sand	-			

984*	WX/18-19	Dark brown earth	$\frac{1}{2}(?)$ 12	
985*	WX/18-19	Mixed brown earth	12	
986	WX/18-19	Unstratified	(e?) 18 (B + mod)	m w
987	X/12-14	Topsoil	Mod	m
988	X/12-14	Light mortary earth	B + 16 + 18	m
989	X/12-14	Upper part of Pit I	1 17	i w
990	X/12-14	Pit I	$\frac{1}{4}$ 17	674-85 (424) 713/4 (444)
991	X/12-14	Packing of Pit I	16/e 17 (+ 17/18)	
992	X/12-14	Packing of Pit I (above 993)	$\frac{2}{2}$ 17	
993	X/12-14	Packing of Pit I (beneath 991); infilling of square feature	m 16+	
994*	X/12-14	Pit in NE	1 12/e 13	
995*	X/12-14	Stone fill in NW corner over 994	-13	i
996	X/12-14	Dark mortary fill	B (+17)	
997*	X/12-14	Dirty mortary fill in S	12-13	i m w
998	X/12-14	Rubble over N pier in cistern	-	m
999*	X/12-14	Limepit	(1?) 13	
1000*	X/12-14	White rubbly fill to E of N pier	m 12+	886-912 (702) i m W
1001*	X/12-14	Mortary fill in cistern to S, from 3.70 m.	$\frac{2}{2}$ 12	i M w
1002	X/12-14	Silt under 1000	-	945-c.950 (795)
1003	X/12-14	Cleaning	12 + T	i m
1004	X/12-14	Cleaning	-Mod	
1005*	X/15	Light mortar	1 12+	II M
1006*	X/15	Light black soil	1 12	i m w
1007	X/15	Cistern fill	$-\frac{2}{2}$ 12 (+ 1 17/e 18)	i
1008	X/15	Cistern fill	-	

Number and grid reference	Description of level	Pottery	Coins	Other	Section
CHURCH MAIN EXCAVATION					
1009* X/15	Cistern fill	$\frac{3}{4}$ 12	c.1050-c.60 (830)	m w	
1010 X/15	Unstratified	-	886-912 (723) 970-76(?) (802)	M	
1011* X/15	Light grey rubbly soil	11/12 + $\frac{3}{4}$ 12	945-c.950 (791)		
1012* X/15	Cistern-fill	$\frac{3}{4}$ 12			
1013* X/15	Silt on cistern-floor	m 12			
1014 X/16-17	Topsoil	-19			38,40
1015* X/16-17	Mortary rubble	$\frac{2}{2}$ 12	641-68 (392) 1185-95 (876)	i M	38,40
1016* X/16-17	Black earth	10-11 + m 12	1204-61 (884) ¹⁵		38,40
1017* X/16-17	Dry brown sandy soil	l 11			38,40
1018* X/16-17	Black earth & charcoal	$\frac{2}{2}$ 11			40
1019* X/16-17	Silt	m 12+			
1020* X/16-17	Fill between walls	$\frac{3}{4}$ 12 (+10/e 11)			40
1021 X/16-17	Unrecorded	-			40
1022 X/16-17	Mortary rubble	-			38
1023 X/16-17	Unstratified	-			
1024* X/16-17	Mortary rubble	$\frac{3}{4}$ 12			
1025 X/16	Unrecorded	-			

¹⁵649, 747, 792 and 825 also in this level

1026	X/16	Unrecorded	-		i
1027*	X/16	Unrecorded	5 + c. 8		
1028*	X/16	Unstratified	6		
1029*	X/17	Unrecorded	$\frac{1}{2}$ -m 12	498-512 (45)	
1030*	X/17	Unrecorded	2 11/e 12		
1031*	X/17	Bottom of drain	2 11/e 12		
1032*	X/17	Unrecorded	m 5		
1033*	X/17	Pottery group contained within 1032	e 5	4c (A907)	
1034*	X/17	Unrecorded	5		
1035*	X/16-17 area	Unrecorded	e 10 + $\frac{1}{2}$ 11	6c (A981,A992)	
1036	XY/16-17.b (NS)	Unstratified	10-11 + 12 + T B-2 12 + T		m
1037	XY/16-17.b (NS)	Unstratified	-Mod		
1038	XY/16-17.b (NS)	Light rubbly earth	(B-) 18		M
1039*	XY/16-17.b (NS)	Unrecorded	m 12 +		
1040*	XY/16-17.b (NS)	Black earth	m 12	491-498 (38)	
1041*	XY/16-17.b (NS)	Light brown earth	m 12+		P
1042*	XY/16-17.b (NS)	Unrecorded	6/7 + 10/e 11		
1043*	XY/16-17.b (NS)	Black earth with charcoal	$\frac{2}{2}$ 11		
1044	XY/16-17.b (NS)	Burnt material overlying drain-cover	-		
1045	XY/16-17.b (NS)	Black silt with charcoal	2 5/e 6 (+ -19)		i
1046*	XY/16-17.b (NS)	Sand	12	945-c.950 (790) c.1065-c.70 (835)	
1047*	XY/16-17.b (NS)	Mortary rubble layer	e(?)12		
1048*	XY/16-17.b (NS)	Mortar and earth	$\frac{2}{2}$ 11- $\frac{1}{2}$ 12		38
1049*	XY/16-17.b (NS)	Robber-trench	$\frac{1}{2}$ 5 (+B)		

Number and grid reference	Description of level	Pottery	Coins	Other	Section
CHURCH MAIN EXCAVATION					
1050*	XY/16-17.b (NS)	l 11/e 12			
1051*	XY/16-17.b (NS)	m 5 (+ m 12)		w	
1052	XY/16-17.b (NS)	-			
1053*	X/17-18.b (EW)	m 12+			
1054*	X/17-18.b (EW)	m(?) 12			
1055	X/18	-19/20	666-8 (389)		37
1056	X/18	m 12 (+19)			37, 38
1057*	X/18	l 10/e 11			37, 38
1058	Y/16-17	R + B + T	6c (A972)		
1059	Y/16-17	$\frac{2}{2}$ 12 (+ 18/19) B+17	5c? (A933) 1730 (A1049)	i m	34, 41
1060*	Y/16-17	$-\frac{2}{2}$ 12	931-44 (748) 976(?) -1030/35 (808)		34, 41
1061*	Y/16-17	$\frac{1}{2}$ 12 ($\frac{2}{2}$ 12)			34, 41
1062*	Y/16-17	l 10-11	1195-1203 (880)		34, 41
1063*	Y/16-17		572/3 (184)		34
1064*	Y/16-17	l 10/e 11			34, 41
1065*	Y/16-17	-10	c.1065-c.70 (833) ¹⁶		34
1066*	Y/16-17	12			34, 41
1067	Y/16-17	-10 (+ l 15)			34
1068*	Y/16-17	6 (+10-11)		i	34, 41
1069	Y/16-17	-			

¹⁶92, 212 and 812 also in this level

1070*	Y/16-17	Dark brown soil	$(\frac{1}{2}?)6 + 1\ 10/e\ 11$	4c (A906)	34
1071*	Y/16-17	Fill between walls	$-\frac{2}{2}\ 12$		34, 41
1072	Y/15-17 Area	Unstratified	Mixed	945-c.950 (769)	
1073*	Y/15-17 Area	Unrecorded	$-\frac{2}{2}\ 12$		
1074	Y/17-18.b (EW)	Unrecorded	-Mod		
1075*	Y/17-18.b (EW)	Unrecorded	$1\ 12$	1204-61 (887)	
1076*	Y/17-18.b (EW)	Unstratified	R - m B		
1077	Y/17-18	Unstratified	-		
1078*	Y/17-18	Unrecorded	$1\ 10/e\ 11$		
1079	Y/17-18	Unrecorded	R - m 12		
1080	Y/18-19	Rubble layer	18 + mod		37
1081*	Y/18-19	Light brown level	$n? 11 (+\frac{2}{2}\ 12)$	886-912 (704) 13c? (A1042)	37
1082	Y/18-19	Dark brown earth	-12 (+16+)		
1083	Z/15	Unrecorded	$e\ 17$		
1084	Z/15	Unstratified	$e(?)\ 16$		
1085	Z/16-17	Black earth	-Mod		33
1086	Z/16-17	Dark earth with mortar	-12-13 (+17+)		
1087	Z/16-17	Foundation-trench of EW wall	$1\ 17/e\ 18$		33
1088	Z/16-17	Tile-fill in W	-		33
1089	Z/16-17	Rubble-fill in N	10+ (+18)		
1090	Z/16-17	Turkish foundations in S, beneath 1085	17-18?		
1091*	Z/16-17	Light mortary fill in N	11-12		33
1092*	Z/16-17	Light mortary fill in S	10-11+	w	33
1093	Z/16-17	Unrecorded	18+		
1094*	Z/16-17	Continuation of 1091 & 1092	$1\ 12/e\ 13$	i	
1095	Z/18	Unstratified	-		

Number and grid reference	Description of level	Pottery	Coins	Other	Section
CHURCH MAIN EXCAVATION					
1096 Z/18	Medium brown earth	m 16 (+18)			
1097 Z/18	Light rubbly earth	B + 16			
1098* Z/18	Dark earth under 1097	12			
1099 aa/15-16	Hardcore	-Mod		m	
1100 aa/15-16	Light mortary earth	B-13 B+e T		i m w	
1101* aa/15-16	Light mortary earth	10	1204-61 (885)		
1102* aa/15-16	Unrecorded	12			
1103 aabb/15-16.b (NS)	Black earth	Mod			
1104 aabb/15-16.b (NS)	Unrecorded	-			
1105 bb/15-16	Black layer	Mod		m	
1106 bb/15-16	Dark brown earth	B + 12 15/e 16 + 18			35
1107 bb/15-16	Pit in SW	12 15/e 16 (+B)			35
1108 bb/15-16	Yellow mortary earth	-12/13 (+T)			35
1109* bb/15-16	Light mortary fill (continuation of 1108)	-e 13		i m	35
1110 bb/15-16	Disturbance in SW	-			
1111 aabb/15-16	Cleaning	R - mod			
1112* aabb/15-16	Light fill	12 12/e 13	1204-24 (888)	i m p w	
1113 aabb/15-16	Light fill	-c. 1200 + 12 15/e 16			
1114* aabb/15-16	Robber pit in SE	10-11			
1115* aabb/15-16	Robber pit in SW	12 12/e 13			
1116 bb/15-16	Dark earth	-e 12 + 16			35
1117* bb/15-16	Brown earth	11	518-27 (123)		35
1118* bb/15-16	Black earth	e 12	1068-71 (841) 17	i	35

17304, 709 and 811 also in this level

1119*	bb/15-16	Mortary rubble floor-makeup	$\frac{1}{2}$ 12+	35
1120*	bb/15-16	Mortar floor level	$\frac{1}{2}$ 12	
1121	bb/15-16	Wall complex	-	
1122	aa/17-18	Black earth and rubble	-19 (-mod?)	30
1123	aa/17-18	Black earth	e 18	
1124	aa/17-18	Lighter fill between walls in S	e 18	30
1125	aa/17-18	Between walls in N	e 18	30
1126	aa/17-18	Beneath burning in S	-13 (+T -17/18)	30
1127	aa/17-18	Between walls in N, beneath burning	2 17/e 18	30
1128*	aa/17-18	Sandy fill in S	B	m
1129	aa/17-18	Pit	17-18 (+B)	
1130	aa/17-18	Mortary layer in N	B (+ e T)	30
1131*	aa/17-18	Yellowish earth	12-13	30 i m w
1132	aa/17-18	N end below 1130, yellowish earth	-	30
1133*	aa/17-18	Pit	12	
1134*	aa/17-18	Dark layer below 1131	-12+	30
1135	Z/18-aa/17-18 Area	Unstratified	B - 12 (+ T-mod)	
1136	Z/18-aa/17-18 Area	Topsoil	-2 19/e 20	
1137*	Z/18-aa/17-18 Area	Dirty rubble	10-11	36
1138*	Z/18-aa/17-18 Area	Packing of drain in Z/18	$\frac{2}{2}$ 12? e 13	i m
1139	Z/18-aa/17-18 Area	Modern rubbish in SW	-Mod	36
1140*	Z/18-aa/17-18 Area	Contents of drain 1138	$\frac{2}{2}$ 12	i m
1141*	Z/18-aa/17-18 Area	Compact yellow sand in SE	11	
1142*	Z/18-aa/17-18 Area	Darker sand with rubble	B?	
1143	Z/18-aa/17-18 Area	Dark earth in SE	-18+	
1144*	Z/18-aa/17-18 Area	Medium brown earth in SW	$\frac{2}{2}$ 12	i 36

Number and grid reference	Description of level	Pottery	Coins	Other	Section
CHURCH MAIN EXCAVATION					
1145*	Z/18-aa/17-18 Area	B?			
1146	Turkish foundation in centre	m ^l 12			
1147	Yellow sand	B?			
1148	Light rubble in NW	B?			29,36
1149	Light earth S of 1146	B?	450-57 (34)	m	
1150	Stony, light earth beneath 1142 in SE	B?			
1151*	Light rubble in E	ó + 12		i m	28,29
1152*	Black rubble in NE	12/e 13		p	28,29
1153	Brown earth under 1144	B?			
1154	Dark earth under 1150	-			
1155	Grey earth in E	-			28
1156	Pocket of black earth beneath 1155	10+ (15-16)			28
1157*	Loose stony rubble to W of 1146	-			36
1158*	Black earth to N of 1157	- 12/e 13	603-10 (292) 802-3 (550)	p	36
1159*	Dark grey earth in N	12 10-11			29,36
1160*	Burials	10-e 11			
1161*	Very black earth beneath 1160	-12			36
1162*	Fine brown earth beneath 1149	12/e 13	611/12 (300) coin found in burial		
1163	Dark earth in NW	-			
1164*	Light earth beneath 1146	e 13			
1165*	Light bubbly earth (robber-trench)	-	1118-43 (852)		36
1166*	Light sandy earth in SW	m(?) 12			36
1167*	Dark brown earth below 1144	-	1182/3-85 (867)		36

1168*	Z/18-aa/17-18 Area	Light rubble to S of 1159	10-11?	
1169*	Z/18-aa/17-18 Area	Light rubble in N	11?	
1170*	Z/18-aa/17-18 Area	Black stony earth in NW	-	
1171*	Z/18-aa/17-18 Area	White mortary fill beneath 1170	10-11	
1172*	Z/18-aa/17-18 Area	Black earth beneath 1171	8 + 7 11/e 12	
1173*	Z/18-aa/17-18 Area	Eastward continuation of 1170	$\frac{2}{2}$ 11/e 12	
1174*	Z/18-aa/17-18 Area	Silt in drain	7 10-11	36
1175*	Z/18-aa/17-18 Area	Light rubbly fill in robber-trench to E	-	
1176	Z/18-aa/17-18 Area	Dark earth including burials 115-116 E of 1175	12 (+T)	28
1177*	Z/18-aa/17-18 Area	Brown earth in E	$\frac{1}{2}$ 12	
1178*	Z/18-aa/17-18 Area	Light rubbly earth in E centre	-12?	
1179*	Z/18-aa/17-18 Area	Dry brown earth to W	11-e 12?	36
1180*	Z/18-aa/17-18 Area	Medium brown earth	em 12	36
1181*	Z/18-aa/17-18 Area	Dark earth	m ² 12	28
1182*	Z/18-aa/17-18 Area	Rough stones over EW drain in NW & dark earth beside drain	8(-9?)	c.1085-92 (839) ¹⁸
1183*	Z/18-aa/17-18 Area	Very dark brown earth (continuing 1170)	10-11(-12)	
1184*	Z/18-aa/17-18 Area	Black earth under 1183	$\frac{1}{2}$ 12?	491-8 (39) 976(?) - 1030/35 (821)
1185*	Z/18-aa/17-18 Area	Rubble packing in N	-	29
1186*	Z/18-aa/17-18 Area	Black earth over drain 1174	-11	
1187*	Z/18-aa/17-18 Area	Dark brown earth overlying 1184	em 12	28
1188*	Z/18-aa/17-18 Area	Light rubble in S doorway	-12?	
1189*	Z/18-aa/17-18 Area	Dark earth within S doorway	-12	
1190*	Z/18-aa/17-18 Area	Rubble packing beneath screed	10-11	

¹⁸229, 415, 730 and A1040 also in this level

Number and grid reference	Description of level	Pottery	Coins	Other	Section
CHURCH MAIN EXCAVATION					
1191*	Z/18-aa/17-18 Area	B-12			28
1192*	Z/18-aa/17-18 Area	-12			28
1193	aabb/16	B-12 + 15/16 + 18/19	1143-80 (858) ¹⁹	m p	
1194	aabb/16	-2 11/e 12 + e T			
1195	aabb/16	R - 12 + 17			
1196	bb/17-18	-Mod			
1197	bb/17-18	18			
1198	bb/17-18	18 + 2 19		m	
1199	bb/17-18	2 17-18			
1200	bb/17-18	e 18+			
1201	bb/17-18	2 17/e 18			
1202	bb/17-18	2 15/e 16			
1203	bb/17-18	2 15/e 16		i	
1204	bb/17-18	B + 16 + 18	c.950-59 (797) 1042(?) - c.1050 (829)		
1205	bb/18-19.b (EW)	16-17(+)	512-8 (53)		
1206	bb/19-20	Mod			
1207	bb/19-20	18/e 19 + mod			
1208	bb/19-20	2(?) 19			
1209	bb/19-20	e(?) 18			
1210	bb/19-20	2 17		m	
1211	bb/19-20	2 19/e 20			
1212	bb/19-20	-			

19258, 386, 407 and 813 also in this level

1213*	Narthex Sector A	Mixed dark earth	<i>e</i> 10(+?)	945-c.50 (781,783) ²⁰
1214*	Narthex Sector A	Hard stony earth	<i>e</i> 10	931-44 (752) ²¹
1215*	Narthex Sector A	Dark brown earth	<i>e</i> 6 + 11	829-830/1 (639) ²²
1216*	Narthex Sector A	Dark brown earth in wall-recess in E	<i>l</i> 6/ <i>e</i> 7 + $\frac{1}{2}$ 12	
1217*	Narthex Sector A	Doorway in W	-	
1218*	Narthex Sector A	Dark earth in wall-recess in W	<i>m</i> 7 (+10)	780-90 (527) ²³ i
1219*	Narthex Sector B	Mixed dark earth	- <i>l</i> 12 +	c.1075-c.80 (836) ²⁴ m
1220*	Narthex Sector B	Dark earth in wall-recess in E	<i>l</i> 8 (<i>e</i> 9?)	c.1075-c.80 (837) ²⁵ m
1221*	Narthex Sector B	Dark brown earth below 1220 in recess	7/ <i>e</i> 8	778-80 (518) ²⁶
1222*	Narthex Sector B	Hard earth	10+	945-c.50 (788,794) ²⁷
1223*	Narthex Sector B	Dark brown earth	R-10 (+ <i>em</i> 12)	1078-81 (842) ²⁸
1224*	Narthex Sector B	Dark earth in NE corner	- <i>m</i> 6?	651/2 (342)
1225*	Narthex Sector C	Light, stony earth	<i>em</i> 11	
1226*	Narthex Sector C	Heavy, stony earth	<i>e</i> 11 (+12)	803-11 (554) 931-44 (746)
1227*	Narthex Sector C	Dark earth	<i>m</i> (?) 12	498-512 (42) 778-80 (512) 830/31-42 (648)

20271, 343, 434, 653, 655, 713, 715-20, 761-64, A987 also in this level

21375, 435, 691, 722, A988, A1022 also in this level

2266, 79, 103, 108, 131, 133, 151, 154, 175, 225, 248, 265, 277, 288, 318, 324, 329, 355, 368, 433, 458, 505, A904, A949, A990, A1036 also in this level

2370, 132, 155, 159, 176, 223, 224, 253, 255, 257, 289, 291, 305, 310, 357, 364, 370, 396, 421, 443, 471, A950, A989 also in this level

24102, 109, 485, 536, 538, 558, 611, 624, 668, 740, A943, A1026 also in this level

2559, 450 and A905 also in this level

2665, 128-30, 142, 182, 221, 251, 286, 298, 321, 334, 336, 348, 394, 451, 492, A975-77, A989, A1011 also in this level

27106, 287, 466, 484, 501, 517, 526, 529, 559-61, 625, 627, 637, 650, 696, 705, 707, 749, A984, A1012 also in this level

2873, 177, 245, 312, 320, 337-38, 360, 365-66, 373-74, 380, 382, 425, 436, 445, 468, 489, 540, A897, A1004, A1008, A1017 also in this level

Number and grid reference	Description of level	Pottery	Coins	Other	Section
CHURCH MAIN EXCAVATION					
1228* Narthex Sector C	Dark earth below vertical drain in W recess	$\frac{1}{2}$ 7			
1229* Narthex Sector C	Contents of E vertical drain	e(?)6 + 10-11			
1230* Narthex Sector C	Dark brown earth	R?B?			39
1231* Narthex Sector C	Eastern brick-vaulted drain	-11	868-70 (679)		39
1232* Narthex Sector C	Western brick-vaulted drain	$\frac{1}{2}$ (?)6			39
1233* Narthex Sector D	W doorway: light brown earth	7 10/e 11	830/31-42 (672) 945-e.50 (775)		
1234* Narthex Sector D	W doorway: dark brown earth beneath 1233	7 10/e 11	945-e.50 (776) ²⁹		
1235* Narthex Sector D	W doorway: mixed charcoal beneath 1234	10	425-50 (31) 776-78 (507) 803-11 (602)		
1236* Narthex Sector D	W doorway: cleaning	10-11			
1237* Narthex Sector D	Mortary layer	$-\frac{2}{2}$ 12		m	
1238* Narthex Sector D	Brown earth	e 11	970-76(?) (801) ³⁰	m	
1239* Narthex Sector D	Mortary earth with shells	e 11(+)	652/3 (344)		
1240* Narthex Sector D	Mixed sandy earth with bones & shells	e 11	886-912 (695,706) ³¹	m	
1241* Narthex Sector D	Unrecorded	10			
1242* Narthex Sector D	Compact earth	7 10	931-44 (750) ³²		
29508, 548 and 616 also in this level					
30377, 537, 601, 711, 789 also in this level					
3169, 201, 379, 413, 483, 486, 513, 556, 557, 610, 612, 667, 674, 690 also in this level					
32297, 416, 487, 488, 514, 515, 562, 563, 613, 626, A948, A973, A983, A1023 also in this level					

1243*	Narthex Sector D	Brown earth	10+	751-69(?) (469, 479) m
1244*	Narthex Sector D	Very dark earth	R + 7 10+	666-8 (385)
1245*	Narthex Sector D	White mortar	-	7c (A1007, A1015) 686/87 (430)
1246*	Narthex Sector D	Very dark earth	7 8/e 9	821-29 (628) ³³
1247*	Narthex Sector D	Dark earth in SE recess	7 10/e 11	931-44 (751) ³⁴
1248*	Narthex Sector D	Dark brown earth below 1247	8	803-11 (564) ³⁵
1249*	Narthex Sector D	Dark earth in SW recess	-e 10	830/31-42 (651, 669, 675, 676) ³⁶
1250*	Narthex Sector E	Unstratified	11	976(?) - 1030/35 (817) ³⁷
1251*	Narthex Sector E	Light mortar layer	-7 12/e 13	1143-80 (865)
1252*	Narthex Sector E	Dark brown mixed earth	e 11	c. 950-59 (798) ³⁸
1253*	Narthex Sector E	Pit in centre S side	e 11 (+12)	615/6 (319) 686/7 (431)
1254*	Narthex Sector E	Mixed mortar earth	e 11	886-912 (721) 945-c. 50 (779)
1255*	Narthex Sector E	Mixed dark earth	e 11	1118-43 (856) ³⁹
1256*	Narthex Sector E	Mixed brown stony earth	10-11	9c (A1030) ⁴⁰
1257*	Narthex Sector E	Compact grey earth	10-11	870-79 (686) ⁴¹

³³93, 186, 194, 196, 393, 401, 452, 467, 477, 490, 493-98, 500, 516, 530, A974, A1003, A1009, A1021 also in this level

³⁴256, 418, 502, 524, 541-47, 565-89 also in this level

³⁵243, 314, 322, 350, 354, 404, 405, 438 also in this level

³⁶195, 208, 284, 417, 453, 491, 499, A1010 also in this level

³⁷254, 356, 409, 640, 670, A951, A952 also in this level

³⁸35, 161, 227, 244, 266, 339, 503, 590, 652, 685, 712, 714, 782, 785-87, A1027 also in this level

³⁹72, 162, 353, 591, 614, 629-30, 654, 765, 778, 780, 799 also in this level

⁴⁰163, 267, 391, 440, 454, 520, 592, 594 also in this level

⁴¹197, 345-46, 369, 372, 400, 411-12, 414, 420, 427, 470, 504, 593, 595, A1006 also in this level

Number and grid reference	Description of level	Pottery	Coins	Other	Section
CHURCH MAIN EXCAVATION					
1258*	Narthex Sector E	Dark brown earth	10-11	641-68 (395) ⁴²	
1259*	Narthex Sector E	Mixed charcoal & bones in NE recess	1 10- $\frac{1}{2}$ 11	803-11 (596-97) ⁴³	i
1260*	Narthex Sector E	Mixed charcoal & bones in SE recess	m(?) 10	9c (A1031) ⁴⁴	
1261*	Narthex Sector E	Dark earth in SW recess	m(?) 10	1081-92 (844) ⁴⁵	
1262*	Narthex Sector E	Dark earth in NW recess	e 10	886-912 (724) ⁴⁶	
1263	Narthex-S End	Light debris	-Mod		
1264	Narthex Sector F	Packing of modern cistern	-		
1265	Narthex Sector F	Dark earth	-	518-27 (95)	
1266*	Narthex Sector F	Light mortar	$\frac{1}{2}$ 13		I m W
1267*	Narthex Sector F	Brown earth under Turkish wall	$\frac{1}{2}$ (?) 11 + 12		
1268	Narthex Sector F	Pit M	m 16	518-27 (80)	
1269*	Narthex Sector F	Light brown earth	c. 10		i
1270*	Narthex Sector F	Lime	1 12		
1271*	Narthex Sector F	Dark brown mixed earth	m(?) 11		
1272	Narthex Sector F	Dark brown earth	m(?) 11	1143-80 (859) ⁴⁷	i m

⁴²107, 209, 226 also in this level

⁴³340, 506, 521, A1024 also in this level

⁴⁴228, 274, 472, 478, 531 also in this level

⁴⁵51, 134, 156, 423, 533, 549, 598-99, 607, 608, 615, 631-35, 671, A978, A979, A991, A1032 also in this level

⁴⁶222, 422, 473, 522, 525, 532, 600, 656-661, A1033 also in this level

⁴⁷230, 263, 328, 331, 371, 442, 462, 475, 534, 603-5, 731-33, 754-56, 768, 770-71, 827, 834, 838, 847, A902, A1013, A1028, A1034-35, A1037-39 also in this level

1273*	Narthex Sector F	Brown soil	11		
1274	Narthex Sector F	Unrecorded	m 19	931-44 (757) ⁴⁸	
1275	Narthex Sector F	Dark earth in NE recess	8+12, 1 10, B-12/13 + 16/17	614/5 (306) 780-90 (528) 7c? (A1014)	
1276*	Narthex Sector F	Dark earth in E central recess	11	512-18 (48)	
1277*	Narthex Sector F	Dark earth in SE recess	m(?) 11 (+12)	565-78 (204)	
1278	Narthex Sector F	Narthex cleaning	-	886-912 (736) ⁴⁹	
1279*	Narthex Sector F	Cleaning	-10/11		i
1280*	UV/13	Doorway cleaning	6-7 (-12)	666-68 (390) ⁵⁰	
1281*	UV/17	Narthex cleaning	$-\frac{1}{2}$ 12 + e 11	976(?) -1030/35 (823) ⁵¹	
1282*	UV/17-18	Mortary layer	1 10/e 11	715/6? (446)	
1283*	UV/17-18	Mixed sandy earth	1 10/e 11		
1284*	UV/17-18	Light brown earth	m(?) 11		
1285*	UV/17-18	Dark brown earth	1 10	931-44 (744) ⁵²	
1286*	UV/17-18	Mortary layer beneath 1285	m 1 10	886-912 (728,729) 931-44 (766)	
1287*	UV/17-18	Dark compact earth beneath 1286	em 10	751-69(?) (474) 830/31-42 (663) 945-c.50 (774)	
1288	UV/17-18	Surface of tile floor	-	776-78 (509) 8c (A1025)	
1289	UV/17-18	Unstratified	-	776-78 (510)	
1290	Y-bb/13-15 Area	Topsoil and Turkish foundation in NE	R-18		42
1291	Y-bb/13-15 Area	Small pit by SW corner of Turkish foundation	1 16		

⁴⁸199, 215, 511, 535, 734, A980, A1000 also in this level

⁴⁹40, 52, 75, 81, 189, 213, 219, 376, 476, 664, A917, A1020 also in this level

⁵⁰47, 68, 290 also in this level

⁵¹98, 160, 178, 236 also in this level

⁵²275, 662, 692, 725-27 also in this level

Number and grid reference	Description of level	Pottery	Coins	Other	Section
CHURCH MAIN EXCAVATION					
1292 Y-bb/13-15 Area	Pit in Z/14 cut into 1293	1 16	6c (A946, A947) 666-8 (384) 931-44 (743)		
1293 Y-bb/13-15 Area	Brown earth mixed with top of 1299	1 15/e 16 (+ 1 19/e 20)	1118-43 (857)	i m	
1294 Y-bb/13-15 Area	Rubble along N	$\frac{2}{2}$ 12 (+e T)			42
1295* Y-bb/13-15 Area	Robber-trench for N wall of cistern	1 12/e 13			
1296* Y-bb/13-15 Area	Robber-trench to W of 1295	1 11/e 12			
1297* Y-bb/13-15 Area	Light rubble	m 12	1092-1118 (843)	i m	
1298 Y-bb/13-15 Area	Mortary rubble	-12 (+T)		i	47
1299 Y-bb/13-15 Area	Stone-lined pit in Y/15	1 19/e 20	976(?) - 1030/35 (820) ⁵³	i p	44
1300* Y-bb/13-15 Area	Black earth in bb/14	1 6/7 + $\frac{2}{2}$ (?) 12			42
1301* Y-bb/13-15 Area	Similar to 1300	1 6-7 + $\frac{2}{2}$ 12			42
1302* Y-bb/13-15 Area	Mortar fill in aa/13	$\frac{2}{2}$ 12			
1303* Y-bb/13-15 Area	Light rubble along N	12			
1304 Y-bb/13-15 Area	Fill around stone-lined pit 1299	e 16			52
1305* Y-bb/13-15 Area	Rubble along N	m 11+			42
1306 Y-bb/13-15 Area	Light rubble beneath 1293 in aabb/14	$\frac{2}{2}$ 12			
1307* Y-bb/13-15 Area	1306 & 1308 unseparated	10-11 + 12			
1308* Y-bb/13-15 Area	Yellow rubble beneath 1300 in bb/14	1 12/e 13			

⁵³19, 32, 210, A900, A931 also in this level

1309*	Y-bb/13-15 Area	Black stony earth in Z-aa/13	$\frac{2}{2}$ 12	
1310*	Y-bb/13-15 Area	Brown rubbly earth along N	m $\bar{1}$ 12	
1311	Y-bb/13-15 Area	Brown rubbly earth in Z/13	12 (+T)	
1312	Y-bb/13-15 Area	Sand underlying 1293	-	
1313*	Y-bb/13-15 Area	Unrecorded	-11	
1314*	Y-bb/13-15 Area	Sandy mortary earth along N	$\frac{2}{2}$ 11- $\frac{1}{2}$ 12	
1315*	Y-bb/13-15 Area	Black mortary earth in bb/14	12	
1316*	Y-bb/13-15 Area	Black mortary earth in Z/13	12 (+13/14?)	512-18 (58)
1317*	Y-bb/13-15 Area	Brown mortary earth beneath 1316	e 12	
1318*	Y-bb/13-15 Area	Medium brown earth in aa/13	m $\bar{1}$ 12	
1319*	Y-bb/13-15 Area	Dark earth in aa/13-14	$\frac{2}{2}$ 12+	
1320*	Y-bb/13-15 Area	Medium brown sandy earth in aa/13	e 11	
1321	Y-bb/13-15 Area	Fill inside vault of Turkish foundation in Y/13	$\bar{1}$ 17/e 18	
1322	Y-bb/13-15 Area	Fill beside entrance of Turkish vault in Y/13	$\bar{1}$ 12/13 ($\bar{1}$ 17/18)	m
1323*	Y-bb/13-15 Area	Soft black earth in aa/14	$\bar{1}$ 11/e 12	1143-80 (860) ⁵⁴ 47
1324*	Y-bb/13-15 Area	Hard black earth underlying 1298 in aa/15	-11	47
1325*	Y-bb/13-15 Area	Medium brown rubbly earth in aa/14	$\bar{1}$ 12(+?)	821-29 (618)
1326*	Y-bb/13-15 Area	Brown earth in aa/14	m 11 + $\bar{1}$ 12/e 13	m
1327*	Y-bb/13-15 Area	Blackish brown earth with oyster shells & animal bones in bb/14	- $\bar{1}$ 11/e 12	603/4 (293) 802-3 (539)
1328*	Y-bb/13-15 Area	Dry grey soil with mortar fragments, in bb/14	11+	42
1329*	Y-bb/13-15 Area	Soft black earth beneath 1328	$\bar{1}$ 11/e 12	603-10 (270) i m 42
1330*	Y-bb/13-15 Area	Hard white material beneath N part of 1327	6-7+ 10-11	383 (22) 5c? (A932) 518-27? (A938) 47

⁵⁴194, 309, 326, 406, 456, 680, 767, A901, A999, A1019 also in this level

Number and grid reference	Description of level	Pottery	Coins	Other	Section
CHURCH MAIN EXCAVATION					
1331*	Y-bb/13-15 Area	Pocket of dark earth beneath 1326 $\frac{1}{2}$ 12			
1332*	Y-bb/13-15 Area	Light earth beneath 1331 10-11 + (?) $\frac{2}{2}$ 12			
1333	Y-bb/13-15 Area	Medium brown rubble in Y/13 $\frac{1}{2}$ 17/e 18			
1334*	Y-bb/13-15 Area	Sandy rubble (robber-trench) in Zaa/13 $\frac{1}{2}$ 12		i m	42, 45
1335*	Y-bb/13-15 Area	Black earth with charcoal & shells in aa/13 8 + 11/12	751-69(?) (465)		42, 45
1336*	Y-bb/13-15 Area	Rubble in N ambulatory corridor, Z/13-14 -12		I m p	44, 45
1337	Y-bb/13-15 Area	Black earth beneath 1333 -			
1338*	Y-bb/13-15 Area	Medium brown rubble in Z/13 11			42
1339	Y-bb/13-15 Area	Light sandy material beneath 1338 -			
1340*	Y-bb/13-15 Area	Clay with charcoal, animal bones & sherds in Z/13 $\frac{1}{2}$ 6/e 7			42
1341	Y-bb/13-15 Area	Black earth beneath 1333 17/e 18			
1342*	Y-bb/13-15 Area	Light rubble beneath 1341 c. 11			
1343*	Y-bb/13-15 Area	Clay with sherds and bones, beneath 1340 e 6 + e 7			42
1344	Y-bb/13-15 Area	Green sand around stone-lined pit in Y/15 6(+?)			44
1345	Y-bb/13-15 Area	Light sandy soil in Z/14 B-12 + $\frac{1}{2}$ 15	945-e.50 (784)	i m	44, 45
1346	Y-bb/13-15 Area	Pit group, continuation of 1293 $\frac{1}{2}$ 15/e 16	803-11 (555)		44, 45
1347	Y-bb/13-15 Area	In NW corner square room (Z/14) (-12 + $\frac{1}{2}$ 15)?			45
1348	Y-bb/13-15 Area	Light green clay in W part of square room $\frac{1}{2}$ 15+			45
1349*	Y-bb/13-15 Area	Black bubbly earth in N part of square room $\frac{1}{2}$ 12+			44

1350*	Y-bb/13-15 Area	Dirty rubble in SE part of square room	10-11	44,45
1351	Y-bb/13-15 Area	Rubble beneath 1348	-	
1352	Y-bb/13-15 Area	Rubble in N doorway of square room	-	
1353	Y-bb/13-15 Area	Dark earth beneath 1350	10-11 (+15-16)	44
1354*	Y-bb/13-15 Area	Black earth with animal bones & shells in N niche of rectangular structure (Z/14)	10-11	
1355	Y-bb/13-15 Area	Sounding within rectangular structure (Z/14)	-	
1356*	Y-bb/13-15 Area	Rubble with green clay in square room	-10-11	
1357	Y-bb/13-15 Area	Material from Y/13	11-12 (+17)	
1358	Y-bb/13-15 Area	Black soil penetrating 1348	-	778-80 (523)
1359	Y-bb/13-15 Area	Pink rubble in SE part of square room	-	m
1360	Y-bb/13-15 Area	Modern fill in aa/15-16	B + 1 15/e 16 11 (+T)	p 47
1361*	Y-bb/13-15 Area	Light sandy earth	11-12	47
1362*	Y-bb/13-15 Area	Dark brown earth in aa/15-16	em 11 (+12)	778-80 (519) ⁵⁵ p
1363*	Y-bb/13-15 Area	1362 and 1364 unseparated	-m 11	
1364*	Y-bb/13-15 Area	Dark earth beneath 1360	11 (+12)	47
1365	Y-bb/13-15 Area	Dark earth	-18/19	945-c.50 (772) 976-1030/35 (810)
1366	Y-bb/13-15 Area	Dark earth in Z/15	-19	603-10 (264) 43
1367*	Y-bb/13-15 Area	Dark earth, continuing 1362	m(?) 11	615/6 (307) 674-85 (419)
1368	Y-bb/13-15 Area	Light sand	-18+	383-85 (26) 603-10 (272) 43,47
1369	Y-bb/13-15 Area	Dark earth beneath 1368	-	47
1370	Y-bb/13-15 Area	Dark earth in bb/15	10-11 (+ 1 17/e 18)	
1371*	Y-bb/13-15 Area	Dark earth in aabb/16	10-11 + m 12	610/11 (327) 10c? (A1041) 43

⁵⁵268, 299, 317, A895 also in this level

Number and grid reference	Description of level	Pottery	Coins	Other	Section
CHURCH MAIN EXCAVATION					
1372*	Y-bb/13-15 Area	11-12			43
1373	Y-bb/13-15 Area	-19/mod			43
1374*	Y-bb/13-15 Area	7 10-11			43
1375*	Y-bb/13-15 Area	-10			
1376	Y-bb/13-15 Area	-19			
1377*	Y-bb/13-15 Area	11			
	Light rubbly earth in aa/15				
1378*	Y-bb/13-15 Area	$\frac{1}{2}$ 12	945-c.50 (773)		43
	Dark earth in aa/15-16				
1379	Y-bb/13-15 Area	11 (+16)			46
1380*	Y-bb/13-15 Area	12 7 12 + 6		i m p w	46
1380A*	Y-bb/13-15 Area	-			
1380B*	Y-bb/13-15 Area	-			
1381	Y-bb/13-15 Area	-	1030/35-1042 (?) (826) ⁵⁶	m	
	Unstratified				
1382*	Y-bb/13-15 Area	$\frac{2}{2}$ 12		i	
	Unstratified				
1383*	Y-bb/13-15 Area	12			
1384	Y-bb/13-15 Area	-			
1385*	Y-bb/13-15 Area	-e 13	611/12 (316)		
1386	Y-bb/13-15 Area	-			
1387	Y-bb/13-15 Area	7 18/e 19		i m	
1388*	Sounding C V/17	c. 5			
1389*	Sounding C V/17	7 5/e 6			
1390*	Sounding C V/17	5		m	
	Admixture of 1389 and green clay				

5629, 54, A903 also in this level

1391*	Sounding C	V/17	Dark earth with clay	$\frac{2}{4}$ 5	395-408 (25) 4c? (A916) 518-27 (97)	
1392	Sounding C	V/17	Black earth in drain	—		m
1393	Sounding D	aa/23	Street surface	e 20	1204-61 (881)	
1394	Sounding D	aa/23	Tile-floor	—		
1395	Sounding D	aa/23	Burnt layer	-Mod		
1396	Sounding D	aa/23	Underlying floor	—		
1397	Sounding D	aa/23	Dark brown earth	e 20		m
1398	Sounding D	aa/23	Loose soil in NS drain	l 19/e 20		
1399	Sounding D	aa/23	Compact black earth beneath 1398	l 19/e 20		
1400	Sounding D	aa/23	Dark brown earth	—		
1401	Sounding D	aa/23	Rough stone drain in SW	—		
1402	Sounding D	aa/23	Black earth inside semi-circular row of stones	l 17/18		
1403	Sounding D	aa/23	Black earth in & around drain 1401	18		m
1404	Sounding D	aa/23	Packing for tiles in S, over 1408	16 + 18(+?)		
1405	Sounding D	aa/23	Black earth in circular feature cut into 1402	18		
1406	Sounding D	aa/23	Black earth in SW	18		i
1407	Sounding D	aa/23	Some of 1402 & 1405 and Pit L unseparated	m 16 + e 18		
1408	Sounding D	aa/23	Brown earth	m 16 (+ l 17)		m
1409	Sounding D	aa/23	Medium brown clayey earth	m 16		
1410	Sounding D	aa/23	Light brown earth	m 16		
1411	Sounding D	aa/23	Dark brown earth	m 16		w
1412	Sounding D	aa/23	Dark brown earth	m 16		
1413	Sounding D	aa/23	Medium brown earth	m 16		
1414	Sounding D	aa/23	Dark earth in NW	18		
1415	Sounding D	aa/23	Compact black earth to S	17-18		

Number and grid reference	Description of level	Pottery	Coins	Other	Section
CHURCH MAIN EXCAVATION					
1416	Sounding D aa/23	-			
1417	Sounding D aa/23	-20			
1418	Sounding D aa/23	-2 17/e 18			
1419	Sounding D aa/23	-			
1420	Sounding D aa/23	m 16			
1421	Sounding D aa/23	12 + 16			
1422	Sounding D aa/23	-			
	Large pieces of Byzantine brick & mortar				
1423	Sounding D aa/23	12 + m 16			
1424	Sounding D aa/23	-			
1425*	Sounding D aa/23	12		m	
1426	Sounding E cc/17	e 10 + 15/16			
1427	Sounding E cc/17	$\frac{2}{2}$ 6 18 mod		i	
1428	Sounding E cc/17	2 19+	976(?) - 1030/35 (822)		
1429	Sounding E cc/17	2 19		p	
1430	Sounding E cc/17	B + e 16 (+19)			
1431*	Sounding E cc/17	e 10			
1432*	Sounding E cc/17	e 10(+)			
1433	Sounding E cc/17	10 + 2 17			
1434*	Sounding E cc/17	e 10 (+)			
1435	Sounding E cc/17	e 10 + e 16			
1436	Sounding E cc/17	B + e 16			
1437	Sounding E cc/17	-e 16			
1438	Sounding E cc/17	-e 10 (+ e 16)			
	Compact earth beneath 1435				

1439*	Sounding E	cc/17	White earth	m B	m
1440	Sounding E	cc/17	Top of Pit O	1 16 + 18-20	
1441	Sounding E	cc/17	Dark brown earth (Pit O)	1 16	
1442	Sounding F	cc/18	Unstratified	$-\frac{1}{2}$ 17	1042(?) - e.1010 (828) i
1443	Sounding F	cc/18	Hard topsoil	B + e 16	
1444	Sounding F	cc/18	Unrecorded	B + m 16	
1445	Sounding F	cc/18	Earth below level of Byzantine wall	e 16	
1446	Sounding F	cc/18	Mainly grey earth, mixed	$\frac{2}{2}$ 16 + 18	m
1447	Sounding F	cc/18	Unrecorded	$\frac{2}{2}$ 16	
1448	Sounding F	cc/18	Unstratified	-17	
1449	Sounding F	cc/18	Unstratified	-18 + mod	970-76(?) (803) (?)
1450	Sounding G	ccdd/18	Unstratified	e 16	w
1451	Sounding G	ccdd/18	Unstratified	B + 18	
1452	Sounding G	ccdd/18	Topsoil	Mod 10 + $\frac{1}{2}$ 16 R B 17	
1453	Sounding G	ccdd/18	Unrecorded	e 16 (+ 1 16)	
1454	Sounding G	ccdd/18	Unrecorded	e 16	
1455	Sounding H	dd/18	Unstratified	$\frac{2}{2}$ 16 T-mod	886-912 (735)
1456	Sounding H	dd/18	Unstratified	6 6-16	p
1457	Sounding H	dd/18	Mixed levels and charcoal layer	$\frac{3}{4}$ 16 + 1 17/18	i
1458	Sounding H	dd/18	NE-SW drain & NW-SE drain	19+	
1459	Sounding H	dd/18	Another NW-SE drain	-	
1460	Sounding H	dd/18	Beneath level of drains	e 6 + B + 16	565-78 (191)
1461	Sounding I	cc/19	Unstratified	Mod 1 6 + T	
1462	Sounding I	cc/19	Unstratified	1 19	4c? (A915)
1463*	Sounding I	cc/19	Light yellow rubble	e 6 (+ 1 6)	m

Number and grid reference	Description of level	Pottery	Coins	Other	Section
CHURCH MAIN EXCAVATION					
1464* Sounding I cc/19	Brown earth to S	1 6			
1465* Sounding I cc/19	Pit cut through 1466	$\frac{2}{2}$ 6			
1466* Sounding I cc/19	Pink screed	-			
1467* Sounding I cc/19	Light brown rubbly earth beneath 1466	1 5		m	
MISCELLANEOUS					
1468 P/11	Stairway pier	-m 17			
1469 QR/17-18	Spoil from cable-trench along W side of slip road	B + T			
1470* Y/15	S wall of square chamber, from mortar of wall	e 6			
1471* X/16	S wall of NW complex, from mortar of wall	$\frac{2}{4}$ 6			

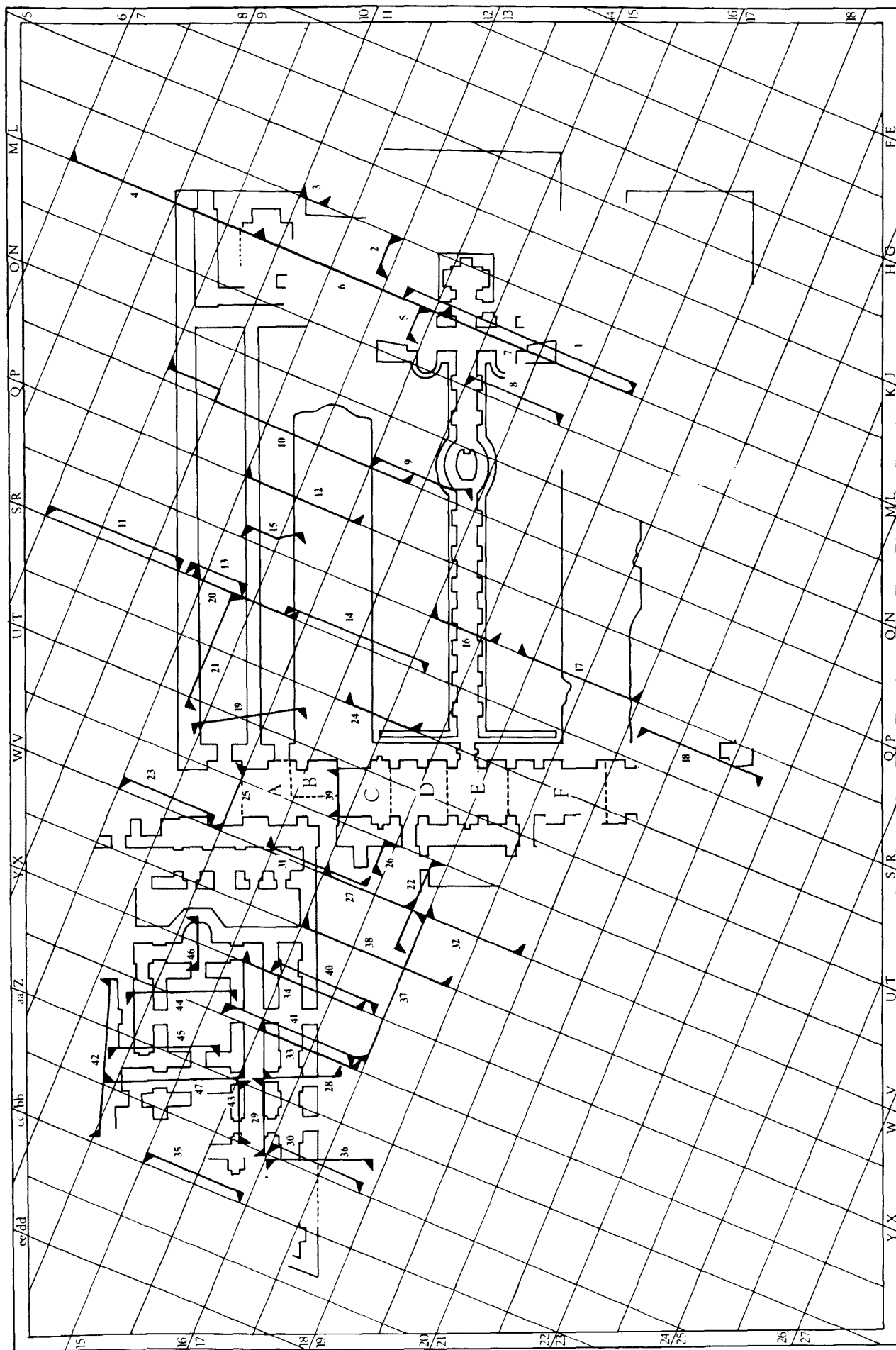


FIGURE A. Key to Sections and to Narthex Sectors

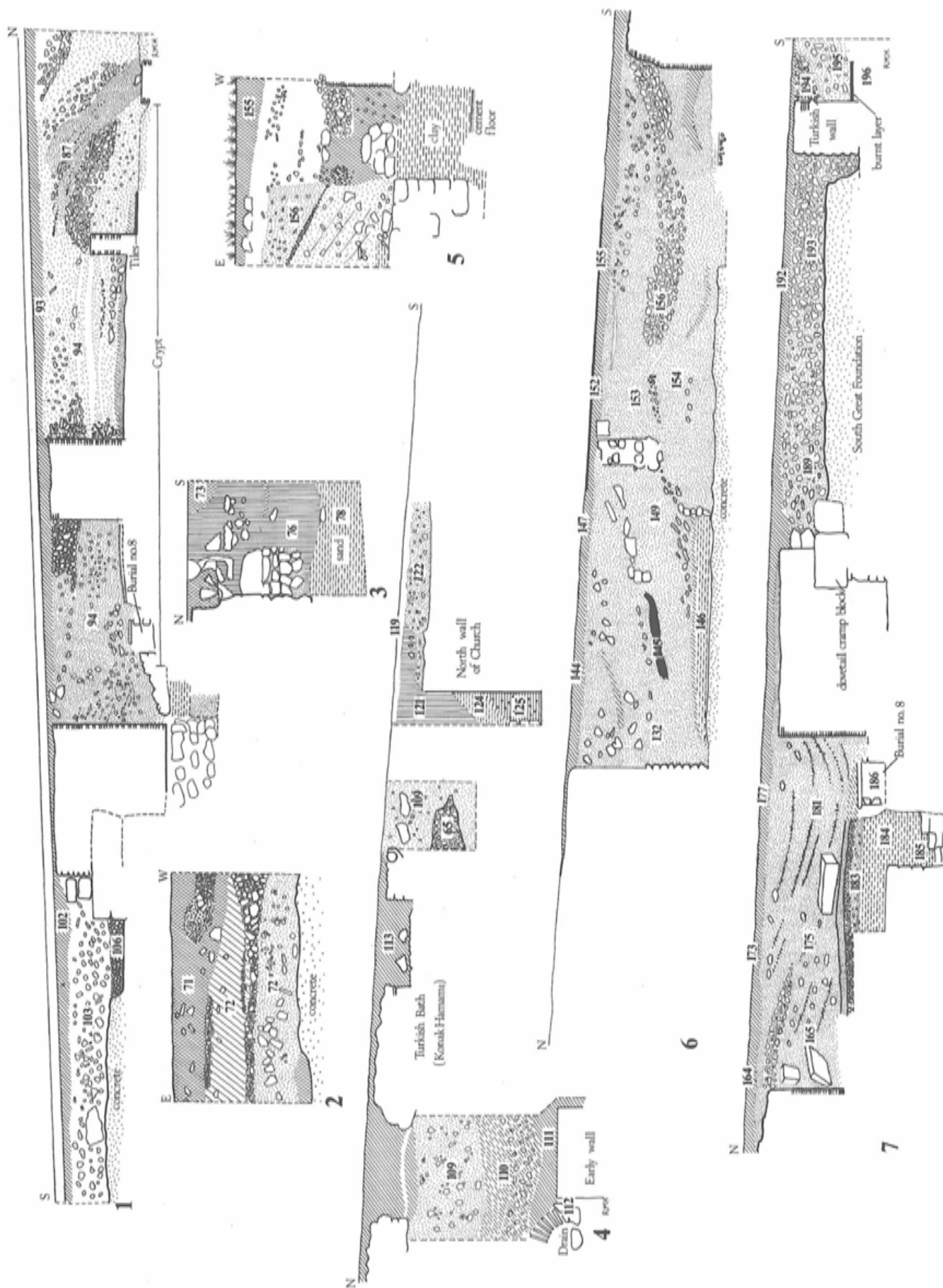


FIGURE B. Sections 1-7 (scale 1:100)

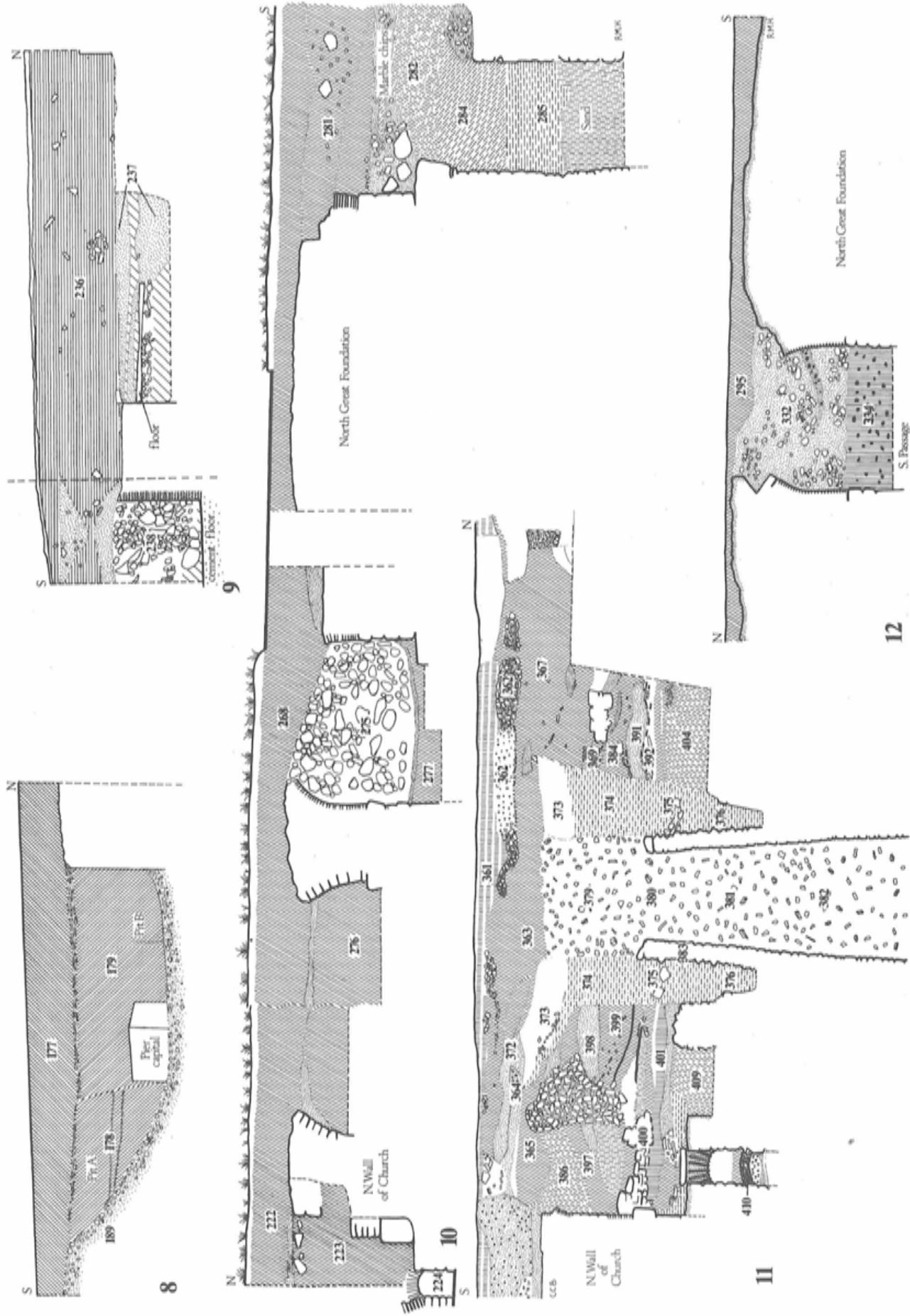
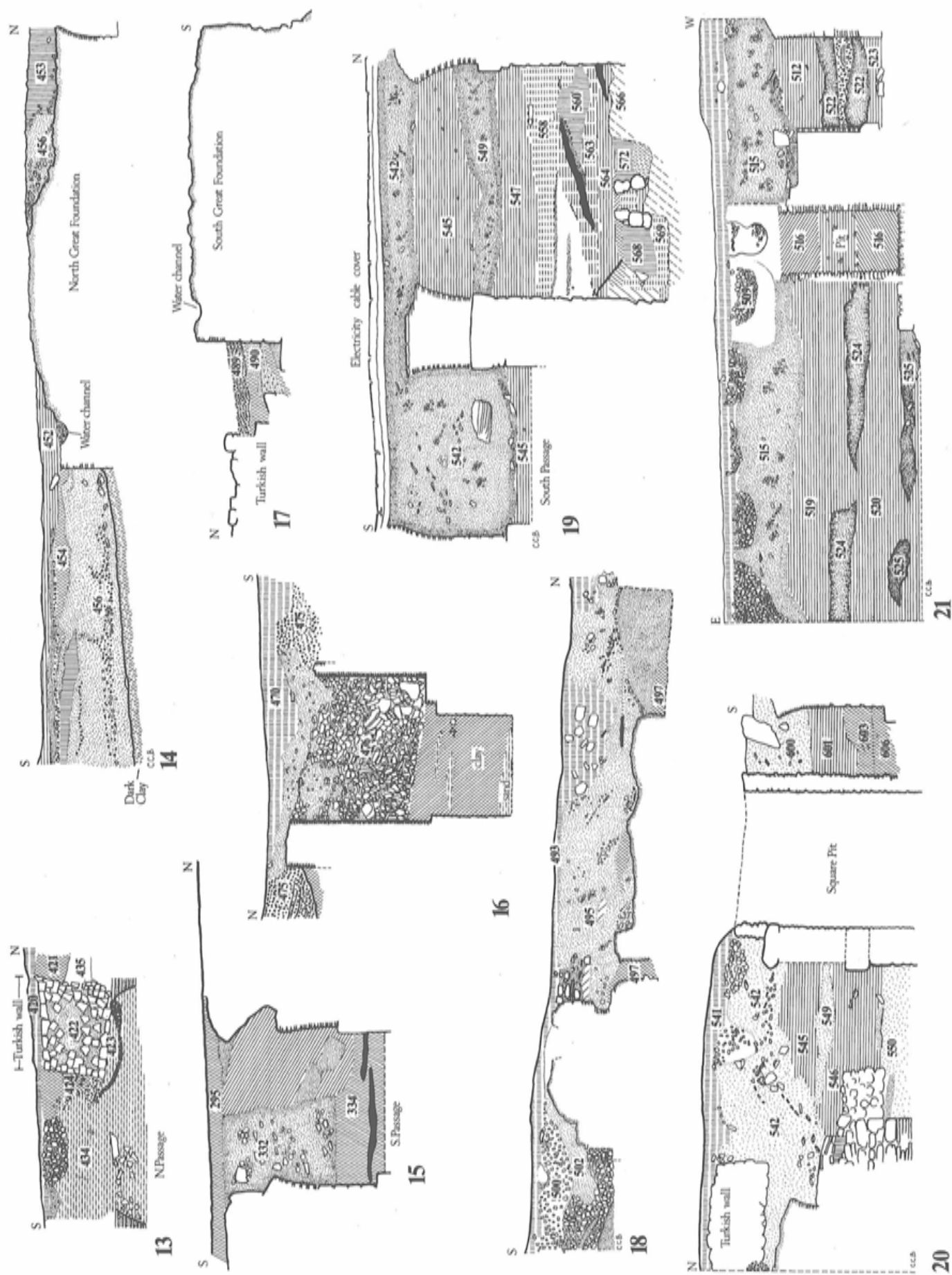
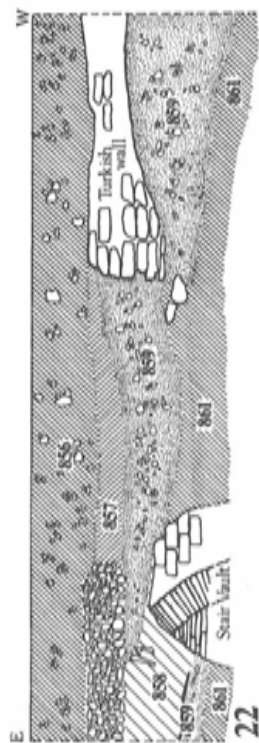
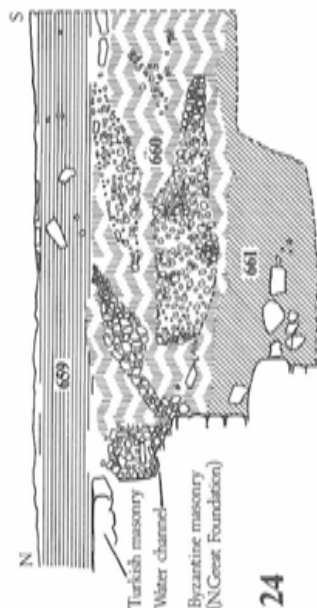


FIGURE C. Sections 8-12 (scale 1:100)

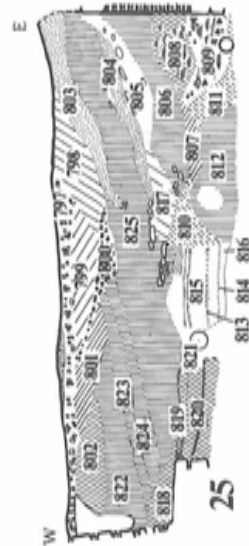




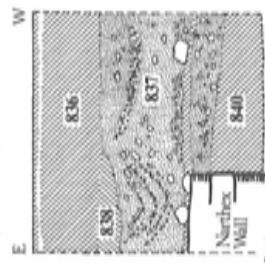
22



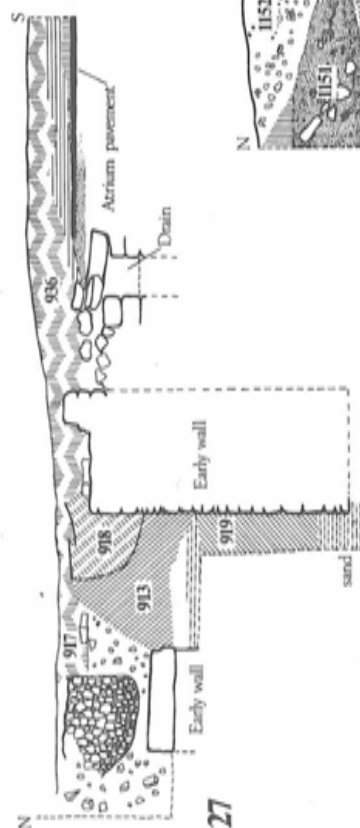
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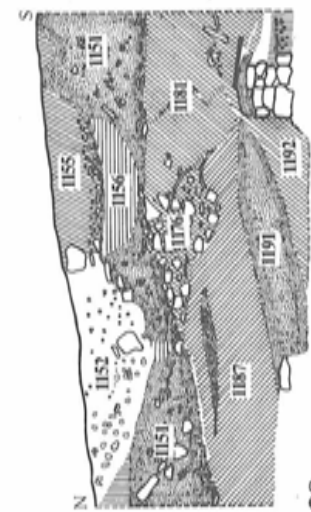
25



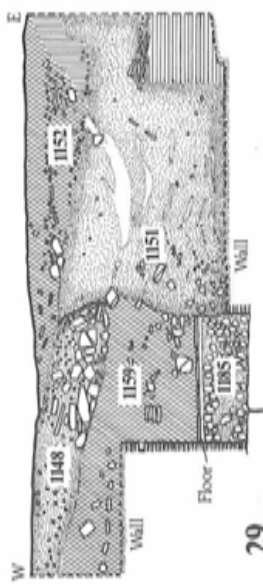
26



27



28



29

FIGURE E. Sections 22-29 (scale 1:100)

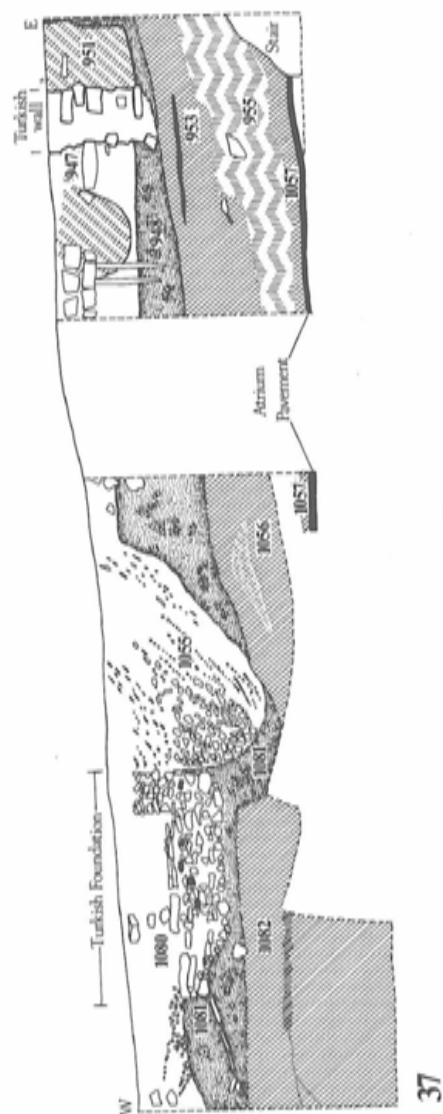
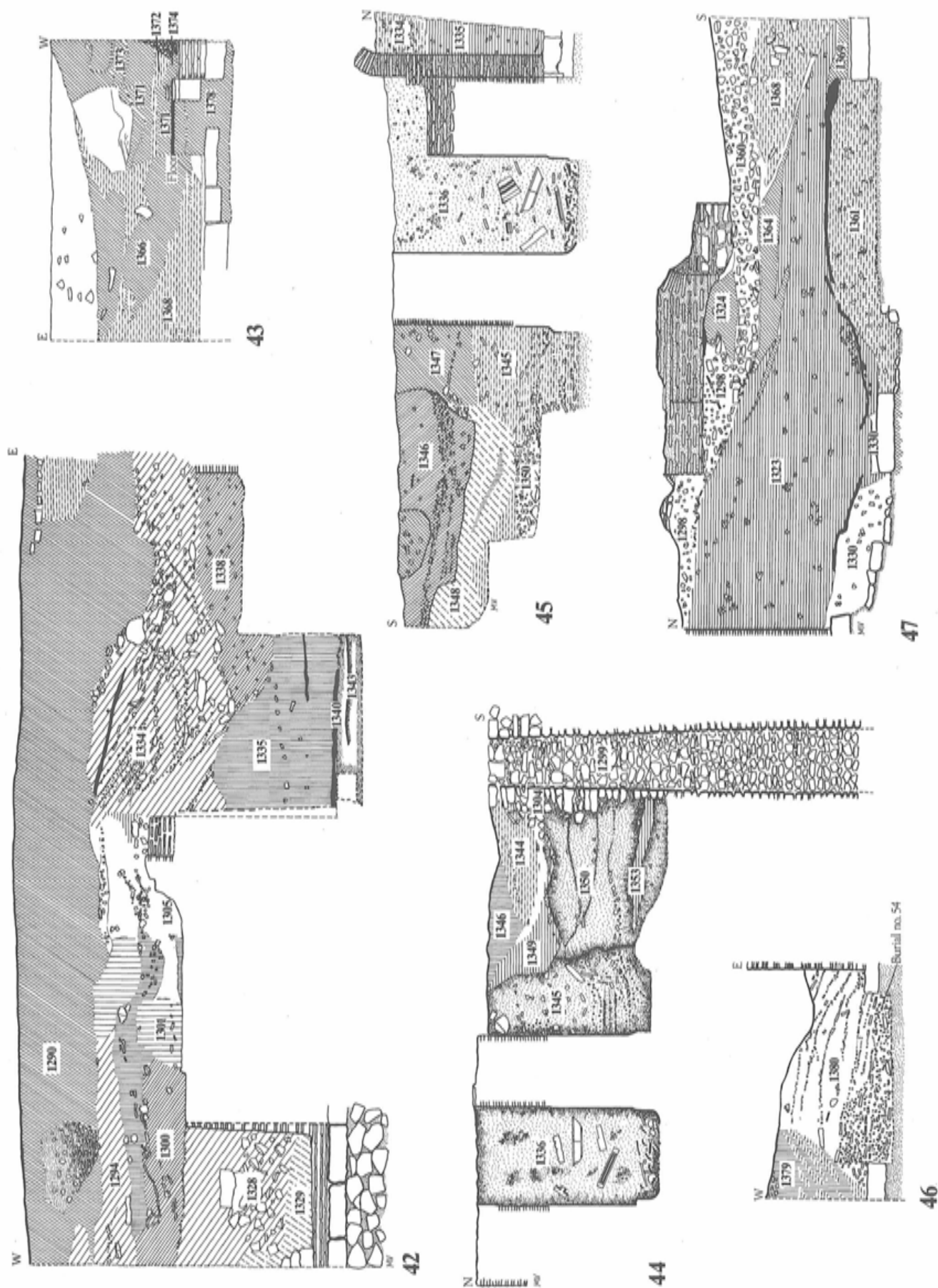


FIGURE G. Sections 37-41 (scale 1:100)



Chapter Four

INTERPRETATION

R. M. HARRISON

AFTER the description of structural remains and the tabulation of levels, a general evaluation and reconstruction of the site's history may be attempted. This interpretative section is of a different order from chapters 2 and 3, which are, as far as possible, descriptive. Discussion of the church's elevation, which is of a different order again, is postponed to chapter 15.

The evenness of the archaeological record is of course affected both by the nature of the site and by the restraints of the excavation. The site was that of one immense construction, whose massive foundations restricted the areas where earlier remains could be sought and where later remains might survive more recent levellings. The excavation, conducted at speed and with limited resources, had as its primary objective the sixth-century church, to which the study of both later and earlier material was incidental.

Until 324 Saraçhane lay outside the city, encroached upon by an extensive cemetery, which probably flanked the northern of the two roads into Thrace. A sarcophagus in the underpass was *in situ* (cf. p. 11 above), a westerly outlier of the cemetery for which there is abundant evidence in the Beyazit region; and several third-century grave-stelai from a pre-church context in the north aisle were further evidence for a cemetery in this general area (cf. pp. 166-7 below).

In 324 Constantine marked out the line of the walls of his capital, which incorporated Saraçhane and which were superseded in 413 by the land-walls of Theodosius II. During this period the preliminary lay-out of this quarter was presumably established or confirmed, the main alignments being determined by the lines of the Aqueduct of Valens and the northern branch of the Mesê. In 450-2 the Column of Marcian was erected on high ground some 230 m west of the site, on an oblique alignment. In the sixth century, Anicia Juliana also chose an oblique alignment for St. Polyeuktos.

At the centre of the underpass, mechanical excavations disclosed substantial stone and brick walls at 6 to 8 metres below modern street-level on an alignment

close to that of the Aqueduct; with these walls was associated an enormous brick-vaulted drain running eastward. These structures were attributed to the Early Byzantine period, although there was no conclusive dating evidence. The bulldozers turned up monolithic columns of granite and capitals and bases of Proconnesian marble in abundance, the majority reused in Turkish foundations. The style of these architectural fragments was consistent with an approximately fifth-century date.

At the end of the first quarter of the sixth century, construction of Anicia Juliana's great church was well under way. The dates 524-7 proposed by Mango and Ševčenko on internal evidence from the dedicatory epigram were confirmed in general terms by the pottery and coins and perhaps in more specific terms by the brickstamps. Pottery associated with the construction includes groups from the fill of a drain cut by the apse (level 36*), the make-up of the nave floor (levels 191*, 254*, 256, 261*, 265*, 346*, 352*, 454*, 456*, 459*, 465*, 471*, 479*, 480*, 622*, 624*, 626*, 628*, 636*, 639*, 1025), from the underpinning of the atrium pavement (1467*), from the mortar of the pier fallen in the atrium (920*), and from the mortar from the south wall of the northwest complex (1471*). Although only one coin was found in the above levels (a pentanumismion of Justin I(?) in level 261*), coins of Justin I (518-27) were generally frequent in other early layers, implying some particular activity then. As for the brickstamps, an analysis of recorded indictions (Table 2, chapter 10 below) shows one cluster of third- and fourth-year examples and another of twelfth- and thirteenth-year examples, the latter including all the light bricks of Type E, which are assigned to the superstructure. The years 524/525 and 525/526 were the third and fourth years of one indiction cycle, and correspond nicely with the period when the church is thought to have been under construction; that there are no examples of the fifth year would simply mean that construction was completed in about two years and that work

was now concentrated on interior decoration and furnishing. The other cluster, of light bricks, is presumably attributable to the twelfth and thirteenth years of the previous cycle, that is to 518/519 and 519/520, and presumably they simply represent old stock. A less likely hypothesis is that they represent a major repair to the church (collapse of dome?) after Anicia Juliana's death and during the reign of Justinian.

Church, atrium, and the complex of buildings north of the atrium are believed to be contemporary. Whereas the atrium lay at ancient ground level, the floor of the church was raised some 5 metres on substructures, and access to it from the atrium was achieved by a broad staircase on the church's main axis. The complex north of the atrium also consisted of substructures for a small apsidal building (probably a Baptistery) with surrounding terrace, whose floor was at the same level as that of the church. The north side of this complex was not found, and it seems likely that it connected with Anicia Juliana's palace, which is known to have been very close to the church; there was presumably direct *piano nobile* access from palace to church. The church, which lay on a southern slope (as shown by the directions of drains in the narthex and by pre-church levels in the north aisle and in R/9-11), was an addition to the palace; if it lay south of the palace, that is on somewhat lower ground, there might be some explanation here for the high substructures.

Although some fourth- and fifth-century buildings at Saraçhane followed a different alignment, two fifth-century walls (associated levels 926*, 1033*, 1049*, 1051*) in the northern part of the atrium, which were suppressed when the church was built, had lain on exactly the same alignment as that of the church. It may be supposed that the identical alignment of the church was determined by a substantial adjacent building (or buildings) which was not suppressed.

There is little evidence in the early period for structural modification or repair. The first clear alteration was the careful bricking up at both ends (presumably on the same occasion, for the brick work is identical) of the axial passage. That narthex and crypt remained accessible is indicated by the careful exterior finish to this blocking, and it is possible that the passage itself, which lay empty of rubbish until the church's destruction, remained accessible by a trap from above. Arguments that the blocking was early, perhaps even of the period of construction, are the quality of the brick work, the lack of Early Byzantine fill (or even floor) in the passage, and the complication at the west end of substantial drains from the northern and southern great

foundations. These drains unite on the axis of the passage to pass westwards into a large drain beneath the narthex. It is not easy to reconstruct a floor above this junction, and the passage may indeed never have served as such. Unfortunately, the only stratigraphic evidence recorded is that level 1259*, a late tenth- to early eleventh-century fill in the narthex, had accumulated against the western blocking.

A number of small deposits, particularly at floor-level in the western sector of the northern north-aisle passage (levels 565*-569*), are evidence for some activity in the substructures in the second half of the sixth century or early part of the seventh. About the middle of the seventh century the levels just mentioned were sealed by a huge mixed deposit of dumped material (levels 559*, 560*, 563*, 564*), which spanned a period of about one hundred years and effectively choked the passage. Unless the passage was filled to provide additional structural solidity (and it will be recalled that the central sector was in fact never dug out), we may suppose that it was regarded simply as a convenient place for the disposal of material either from a major cleaning-operation in or around the church or from an excavation of occupation-debris for a new building or cistern. Also of the mid-seventh century, but with much less earlier material, was a deposit (level 1218*) from one of the niches towards the northern end of the narthex. This deposit and those in other niches were, however, isolated when drain-pipe trenches were much later cut down the centre of the narthex. Whether material from a clearance of the narthex-substructure in the middle of the seventh century contributed to the passage-fill cannot now be determined.

In the eighth century more material (levels 604*-612*) was dumped in the northern passage, over the seventh-century deposit, which would by now have settled, and this was followed in the tenth by yet more (levels 536*, 548*, 601*, 603*). There is evidence, too, from other parts of the site of activity over this general period, but what this activity represents it is impossible to say. A remarkable feature of this period at Saraçhane is the very high number of coins found in these substructure-deposits. The church may have continued to function as such, since it was on the emperor's Easter itinerary in the early tenth century and the good condition of its interior was remarked upon by the scholiast of *Palatinus* 23 towards the end of that century.

Considerable quantities of rubbish accumulated during the late tenth and eleventh centuries over the atrium-pavement (levels 845*, 846*, 849*), in the vaulted space beneath the staircase (level 1285*), and

over earlier fills in the narthex-substructure (levels 1238*-1240*, 1252*, 1254*, 1255*). Its compact nature and high proportion of crushed pottery, animal-bone, and carbonized remains make it probable that this debris was an occupation-level, representing some sort of squatter settlement in the atrium and the substructures that were accessible from it. It immediately overlay the atrium-pavement, where that pavement has survived.

In the narthex, two pairs of terracotta pipes were laid from north to south in trenches cut into, and backfilled with, eleventh-century material. Pipe-joints were sealed with a kind of white plaster, which may indicate that they were for a water supply rather than for drainage. The western pair lay above the western of the two sixth-century vaulted drains (or service-ducts) and effectively sealed access to its inspection-covers.

At some stage in the twelfth century the complex of substructures north of the atrium was converted into a cistern. The substructures were cleared of their accumulated deposits, which were successively dumped in the northern part of the narthex, as can be inferred from the direction of tip-lines there and from a reversed stratigraphy, whereby the earliest material predominates in the uppermost levels. The archway opening westwards from the narthex, through which this material was dumped, was now blocked up, as were other openings into and within this complex of substructures. Against the outer wall of the narthex were then applied five narrow, marble pilasters with their capitals for the springing of cross-vaults over the eastern part of the cistern. The piers of brick that correspond with these pilasters are also ascribed to this phase. The eastern sector, which was provided with a tiled floor, was sealed off from the substructures of the apsidal building by various internal blockings, and both sectors were then plastered internally.

An intact area of the deposits that had accumulated in the substructures before construction of the cistern was found in aabb/15-16, in a sector that was not incorporated into the cistern.

Stone foundations underlying the northern part of the atrium were robbed, presumably to provide stone for the cistern construction. Total capacity of the double cistern, to the springing of the vaults, was in the order of 600 metres³ or 600,000 litres. What community or nearby building this large cistern was designed to serve is not known, but its scale and the high quality of some pottery later dumped into it point to some degree of affluence in the immediate neighborhood.

The atrium, recently dug over for stone, now became a cemetery, and a circular monument, consisting

of *spolia*, was erected on the atrium's main axis, presumably as some sort of cemetery-marker. The cemetery appears to have remained in use for a considerable time, with some graves cut by later burials and one burial overlying the monument's base. By the early thirteenth century the church lay in ruins, certainly before structural marbles were removed from it in or after 1204 for transport to Venice and elsewhere. It is argued in chapter 15 that it collapsed to north and to west, and the remains of the narthex and west facade would have fallen out over the area of the cemetery. The brick-pier is the only recognizable element of this collapse, which may have been gradual if the fact that some burials were subsequently cut into the destruction material is taken to imply that the earlier cemetery was not entirely obliterated. The upper levels in the narthex-substructure (e.g., 1251*) consisted of a similar fill of white powdery mortar, with some broken bricks and marble fragments which had escaped, or been rejected by, those in search of building materials. The cistern, too, was choked with destruction material, perhaps from its own vaults and the apsidal building rather than from the church (e.g., levels 1000*, 1001*, 1007-1008, 1009*).

The church, then, was derelict. Some activity on the site in the first part of the thirteenth century is attested both by the pottery (from, e.g., levels 302*, 304*, 308*-309*, 332, 359*) and by the coins (catalogue nos. 881-890), and that this may be associated with quarrying is suggested by the widespread occurrence of small fragments of marble surface decoration (undercut leaves, stems, lattice, etc.) found all over the site in the latest Byzantine levels. Blocks for structural reuse locally might be more serviceable without this elaborate decoration; and some trimming of damage might be desirable for the more elaborate pieces destined for export. The two pier-capitals in Venice (5 a ii and iii) and the column-capital in Barcelona (3 d i) have all lost the openwork that originally supported their projecting upper corners, possibly in transit, but perhaps before they left the site. Bricks were salvaged too, and a regular series of robber-trenches in the north-western sector (e.g., levels 1015*, 1066*, and pl. 52) is evidence for systematic dismantling.

Thereafter, to judge from the almost complete absence of diagnostic material (levels 89 and 360* and coin 891 may be evidence for some slight activity) the site lay unoccupied for more than two hundred years, throughout the rest of the Latin period and for the whole of the Palaeologan. This fits the historical evidence for a drastically reduced urban population, which

now lived in separate nuclei or "villages." It seems unlikely, in view of the extensive robbing which had taken place in the north-western sector and which penetrated to the foundations, that any walls were now left standing above the broad platform of the church's substructures.

After the Turkish Conquest of 1453 the situation changed rapidly, both in the immediate environs of Saraçhane and at the site itself. To the north-west, Fatih Camii, some 500 metres away, was under construction from 1463 to 1470 and, very much nearer, Mimar Üstad Ayas Mescidi was built in 1474-5. In 1489 the Karagöz Camii was erected over the southern part of the ruins of St. Polyeuktos, and, to the north, the Ibrahim Paşa Hamamı was added in ca. 1493-4. The Karagöz Camii, whose ruins probably include the timber-laced foundations in the south-west part of the nave and over the great south foundation (also perhaps the marble cornice 2 i i), and the Ibrahim Paşa Hamamı were both demolished ca. 1940 during clearance for the Atatürk Bulvarı.

Early reoccupation of the site is attested by surface finds, various pit-groups, and shallow, timber-laced concrete foundations, which evidently supported timber superstructures. These foundations overrode the Byzantine masonry and indeed followed a different alignment, reverting to that of the Aqueduct and pre-church levels; by the early Ottoman period the church had been flattened.

The domestic character of the building over the northern and western parts of the site is indicated by the range of pottery, small finds, and other domestic rubbish (e.g., animal-bones and molluscs) recovered from the pits. The affluence of the occupants of these buildings is shown by the very high quality of Iznik

pottery and foreign imports (e.g., Chinese celadon and Italian maiolica), which appear regularly in the pit-groups and as stray finds.

The late fifteenth century is represented by levels 65 (Pit C), 95, 96, and 228, all pits. The small bath-building (Konak hamamı) in M/7-8, which would have been detached because of the fire-risk from the house it served, was cut into Pit C and is probably of the late sixteenth century (cf. level 115). The eastern part of the church's northern north-aisle substructure was adapted for use as an underground fire-shelter (a normal adjunct to large timber houses at this period), and its two Turkish staircases probably gave access to it from the court or garden in which the bath-building lay and perhaps from an adjacent property; the western staircase is associated with the long wall which runs west from Q/12 and which can be dated to the mid-seventeenth century (levels 423, 424, 507, 516). Another underground shelter, barrel-vaulted and entered from the south, was constructed in bb/18; an early date is indicated by levels 1199, 1201-1203, associated with walls that overrode it.

Early walls appear to be of two types, broad shallow "rafts" (like the long wall running west from Q/12 or the wall that crossed the nave) and narrower, deeper-set walls, like those in the western sector (Z-bb/17; cf. sections 30, 33). More could have been recorded of this Ottoman lay-out by the technique of area-stripping, which was, however, ruled out by practical considerations and the need to probe and cover the church by sampling.

The early Ottoman period is better represented than the late; subsequent levellings have removed occupation-levels after ca. 1650, leaving only pits, wells, middens, and stray finds.

Chapter Five

THE MARBLE CARVING

R. M. HARRISON

IN THE FOLLOWING catalogue the prodigious quantity of marble carving (10,476 pieces were listed and notes were made on several thousand more) is divided mainly by function or form into 23 principal categories, as follows:

- | | |
|--------------------------------|-----------------------------|
| 1. Great Entablature | 12. Plinths |
| 2. Cornices and Hoods | 13. Screens and Tables |
| 3. Column-capitals | 14. Posts and Colonnets |
| 4. Columns | 15. Decorated Wall-panels |
| 5. Pier- and Pilaster-capitals | 16. Skirting |
| 6. Piers and Pilasters | 17. Beading |
| 7. Column-scatings and bases | 18. Arches |
| 8. Thresholds | 19. Figured Sculpture |
| 9. Jambs and Lintels | 20. Waterspouts and Gutters |
| 10. Window-frames | 21. Varia |
| 11. Various Mouldings | 22. Disiecta Membra |
| | 23. Pre-Church Sculpture |

Each category is, where appropriate, subdivided by letters. Category 3, for example, covers column-capitals: 3 *a* is one type of capital, 3 *b* another. Where there are several examples of one type, or several fragments that are not necessarily attributable to one example, these are distinguished by lower-case Roman numerals, e.g., 3 *a* i and 3 *a* ii. Category 1 is an exception; the large inscribed blocks are set out in order, by their position in the great inscription, followed by smaller pieces of the entablature. The marble is Proconnesian unless otherwise stated.

Under 22, *Disiecta Membra*, are listed a number of items from other sites that are either certainly or probably attributable to St. Polyeuktos. In particular cases, e.g., that of the capital in Barcelona whose form explains the function of many otherwise unintelligible fragments from the excavation, it has been found convenient to describe these pieces too at the appropriate point in the main part of the catalogue.

1. GREAT ENTABLATURE

a. Inscription.

i. M6877, Mus 71.110. Corner-block with inscription (fig A, pls. 87-89). The principal face carries a formal scheme of erect and pendant vineleaves in a diagonal lattice, the right-hand face a scheme of twisting vine-stems; to the left of the principal face had sprung a wide arch, indicated not only by the inscription that descends from an arch before following the lower straight edge of the block, but by a small area of the soffit preserved on the badly broken left-hand side. The inscription reads: οὐκ ἔψευσεν ἀριστ[ώδιν]ος ἀνάσσ[ης]; this is from line 9 of the Epigram. Letters are in relief, 0.11 m high. Ht. 1.46 m, restored lower width of principal face 1.28 m; found in the destruction layer of the nave passage (Q/16).

ii. M6878, 6879, Mus 71.112, 71.113. Two joining fragments of niche, decorated with peacock, twisting vine-stem, and inscription; the text reads τοῦ ἡ[γ]ας εὐ-σεβ[ί]ης, which is from lines 15/16 of the Epigram (fig. A, pls. 91, 92). The face of the niche (preserved width only 1.01 m) is flat. Ht. 1.30m, w. of soffit 0.365 m; from level 252 (OPQ/16).

iii. M6289, Mus 71.116. Fragment of arch, decorated with peacock, twisting vine-stem, and inscription (fig. A, pl. 93). The text reads . . .]OMENOIN[. . . Although this sequence of letters occurs both in line 13 and in line 25 of the Epigram, the find-spot strongly suggests that it is from the latter. Ht. 0.765 m, w. of face 0.97 m, w. of back 1.23 m, th. 0.865 m; from level 600 (S/13-14).

iv. Mus 5984. Corner-block with inscription (fig. A, pls. 94, 95). Left face: twisting vine-stem above]YCK-

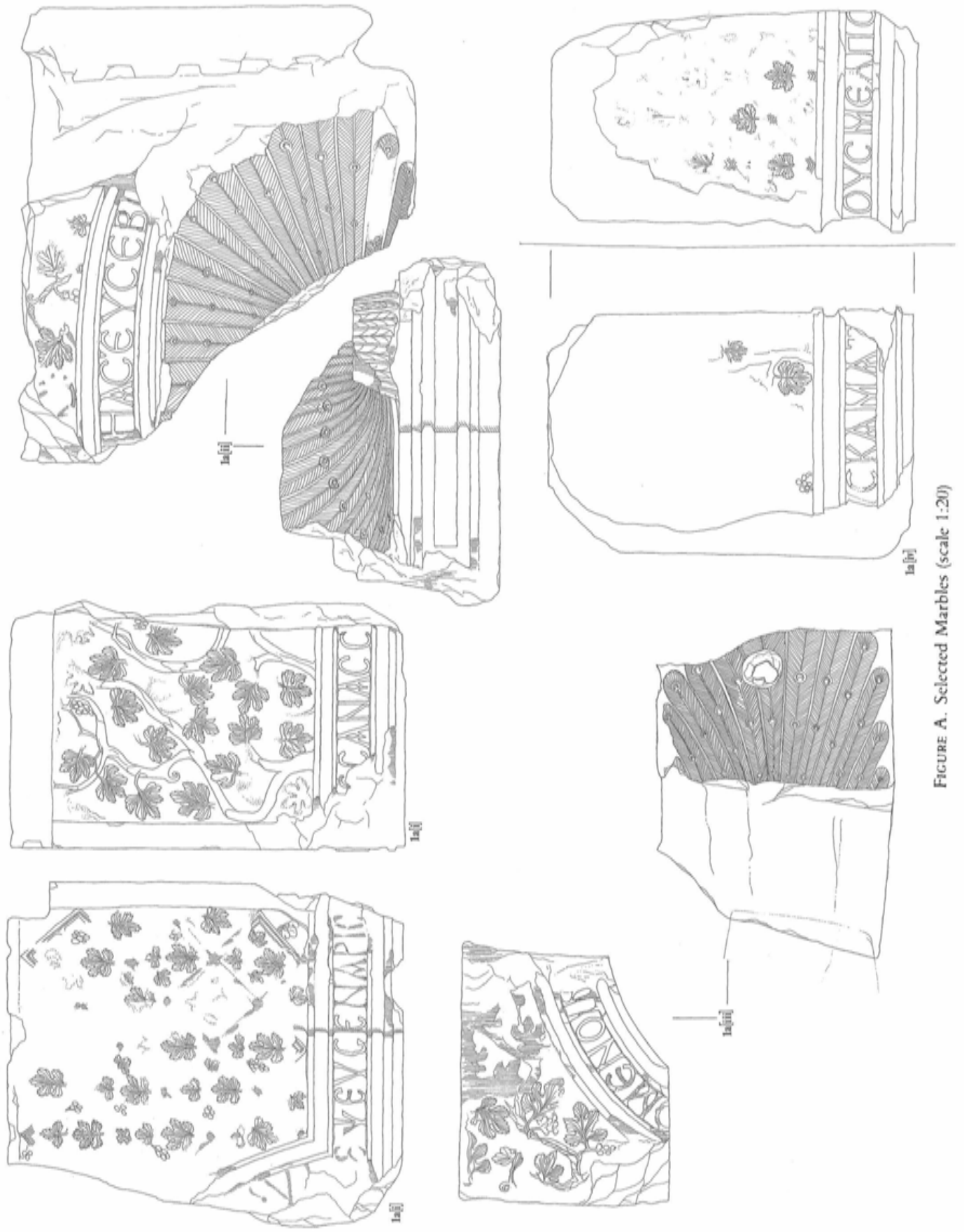


FIGURE A. Selected Marbles (scale 1:20)

AMAT; right face: lattice scheme, with erect and pendant vineleaves, above. The text is from line 27 of the Epigram.

Ht. 1.335 m, w. of left face 0.955 m, w. of right face 0.825 m; found by bulldozer in 1960.

v. Mus 71.115. Right-hand half of arch, decorated with confronted peacocks, twisting vinestem, and inscription (fig. B, pls. 99, 100, 103). The text reads $\theta\epsilon\lambda\omicron\sigma\tau\epsilon\iota\theta\acute{\epsilon}\alpha\ \delta\acute{\omega}\mu\alpha\tau\alpha\ \tau\acute{\epsilon}\upsilon\chi\epsilon\iota$, which is the second half of line 30 of the Epigram. In plan the face of the arch, and that of the two following blocks which were contiguous, presents a shallow concave curve of between 5 and 8 m in diameter. Ht. 1.44 m, actual w. 1.475 m, restored w. ca. 2.80 m, th. 0.85 m-0.865 m; from level 434 (R/13).

vi. Mus 5985. Niche, decorated with peacock, twisting vinestem, and inscription (fig. B, pl. 98). The inscription is the first part of line 31 of the epigram: $\sigma\acute{\upsilon}\delta'\ \alpha\upsilon\tau\eta\ \delta\epsilon\delta\acute{\alpha}\eta\kappa\alpha\varsigma\ \acute{\alpha}\mu\epsilon\tau\epsilon\lambda\epsilon\iota$. . .

Ht. 1.44 m, actual w. 2.26 m, restored w. ca. 2.75 m, th. 0.90 m, found by bulldozer in 1960.

vii. M849, Mus 71.114. Left-hand half of arch, decorated with peacock, twisting vinestem, and inscription (fig. B, pls. 96, 97, 101, 102). The text reads: $\mu\omicron\upsilon\eta\eta\ \sigma\acute{\upsilon}\ \xi\acute{\upsilon}\mu\pi\alpha\sigma\alpha$ [ν . . . , which is the beginning of line 32 of the epigram. The background of the inscription retains traces of a bright blue pigment.

Ht. 1.435 m, w. 1.15 m, th. 0.845 m; from level 332 (Q/13).

viii. M3739. Left-hand springing of arch (or niche) with lower parts of two letters: QI (fig. B, pl. 106).

ix. M3740. Fragment of arch (or niche) with lobe of a vine leaf and two letters: EI (fig. B, pl. 104).

Ht. 0.35 m, l. 0.32 m; Provenance unknown.

x. M7094. Fragment of inscription, on shallow curve (pl. 105). Letters: POI .

L. 0.265 m; from level 542 (STU/12-13).

xi. M10308. Fragment of inscription on slight curve (arch or niche). Lower part of one letter preserved: E . L. 0.13 m; no provenance.

b. Fragments of peacock-body.¹

i. M6779. Right side of peacock-body; right wing and upper part of right leg well preserved, top and left sides of body missing.

Ht. 0.25 m, l. 0.39 m; from S/20, unstratified.

ii. M2751. Part of lower left front of peacock-body with part of left wing and stump of leg.

Ht. 0.21 m, l. 0.31 m, th. 0.19 m; from level 87* (L/13-14).

iii. M1040. Peacock-body (fig. B, pl. 108).

Ht. 0.31 m, l. 0.52 m; from level 94 (L/14-15).

iv. M3677. Right side of peacock-body.

Ht. 0.36 m, l. 0.40 m; from level 733 (UV/15-16).

c. Leg fragments.

i. M3268. Broken boss grasped from above by two three-toed claws, clearly the perch and feet of a peacock (fig. B, pl. 110). The boss is rounded on top and in front; below it is dressed flat, and there is a distinct flare in plan where it is broken from the parent-block.

L. (of projection) 0.23 m, w. 0.26 m, ht. 0.137 m; from area LM/11-12.

ii. M6984. Fragment of boss with two toes of peacock claw.

Ht. 0.10 m, l. 0.16 m; from level 260 (OP/17).

d. Neck fragments.

i. M2412. Neck with studded collar, bent slightly forwards (pl. 107). Very roughly dressed on back of neck, carefully chiselled in front. Lower part of right side preserved to flare of body.

Ht. 0.205 m, lower diam. 0.13 m; from area of crypt (bulldozing).

ii. M7556. Part of studded collar on peacock-neck.

Measurements unrecorded; from level 426 (R/12-13).

iii. M6908. Lower part of neck flaring to join body. Two drill-holes at join.

Diam. of neck 0.11 m; from level 252 (OPQ/16).

iv. M1963. Neck with studded collar (fig. B).

Ht. 0.135 m, diam. 0.105 m (above) to 0.13 m; from level 50 (K/13-14).

v. M7412. Lower part of neck.

Ht. 0.15 m, max. diam. 0.17 m; from level 956 (W/18-19).

e. Peacock-heads.

i. M6926. Left eye of peacock, with top of head, lower part of crest, small ear behind eye, and top of neck. Deep sinking for inlaid pupil.

Ht. 0.17 m, l. 0.13 m; from level 241 (OP/15).

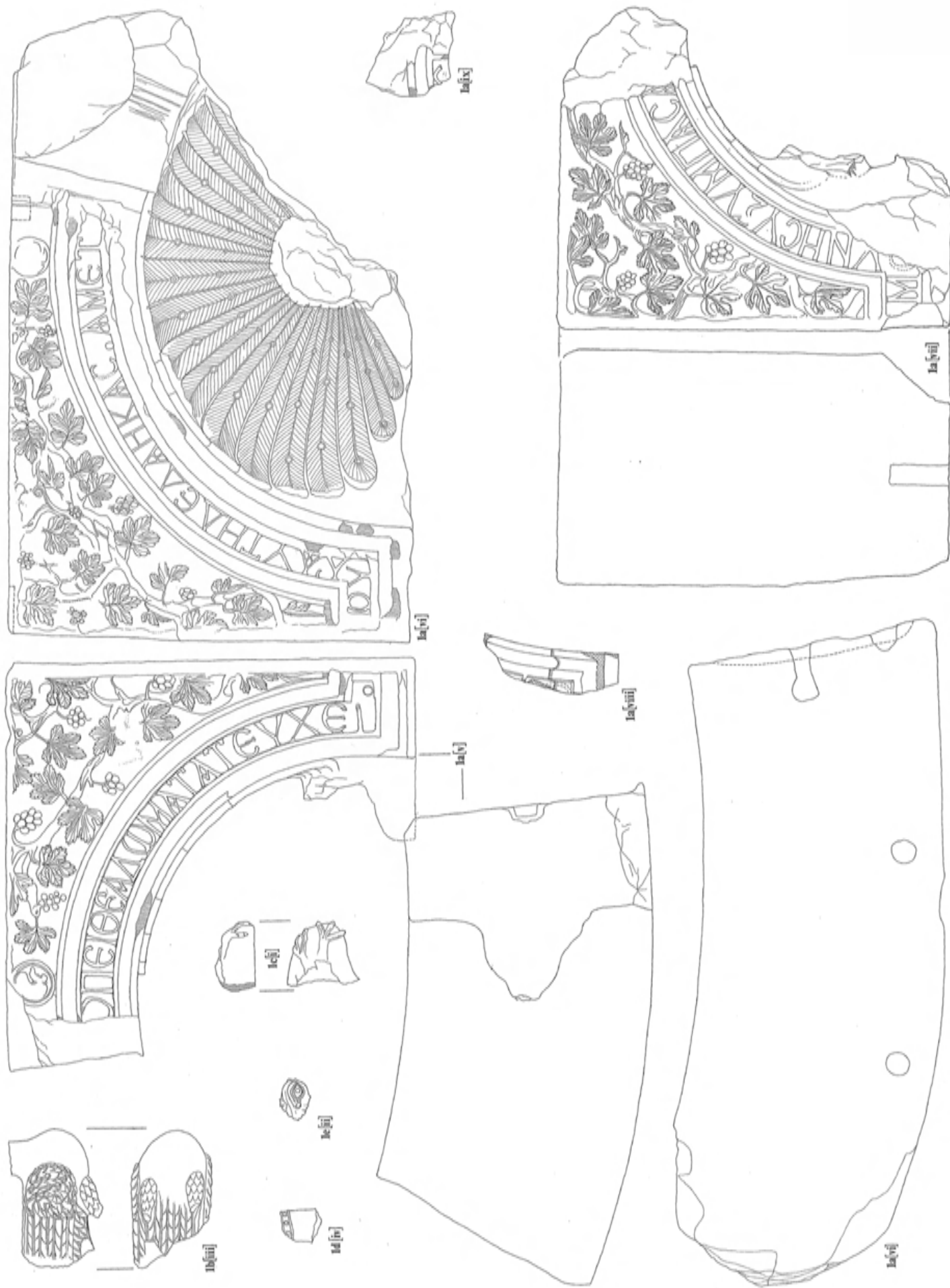


FIGURE B. Selected Marbles (scale 1:20)

ii. M1819. Right eye of peacock and base of crest; pupil deeply drilled (fig. B, pl. 109).

Ht. 0.118 m, l. 0.133 m; from level 87* (L/13-4).

iii. M10729. Left eye of peacock, similar to above but less accurately cut (e.g., misplaced ear).

L. 0.101 m; from level 434 (R/12-13).

f. Peacock tail-feathers.

M105, 429, 822, 1129, 1865, 1878, 2227, 2491, 2699, 2858, 2913, 3029, 4060, 4184, 7007, 7356, 7678, 10569. Nineteen fragments, generally small, were found of displayed tail-feathers. Two are without provenance, two are from Turkish contexts (levels 904, 1014) in the atrium; the rest came from the areas of the crypt (94, 158, 181), north aisle (275, 336, 434, 552, 697), and nave (642, 649, 660).

2. CORNICES AND HOODS

a. Hood with split-palmettes.

i. M3390, Mus 11.119. Right-hand end of cornice (presumed lintel-hood) (fig. C, pls. 111, 112). Decoration: lower fillet with small, pendant, trilobate leaves with sinuous double stems trailing to left and right; erect five-lobed leaves, each surrounded by a penannular hoop with knobbed finials; circular monograms alternating with modillions, each of which has a split-palmette with pendant pomegranates; a row of stylized plants, each of which has two semicircular leaves curving inwards (with lobes inwards) enclosing a central lyre-shaped element beneath two superimposed rows of pellets. Of the four and one-half surviving monogram circles, only two have their monograms, and both of these are damaged. In the lower field between each pair of plants is an eight-petal flower.

Ht. 0.40 m, l. 2.23 m, w. 1.29 m. Found in S/17, together with large threshold and jamb, and probably attributable to the principal doorway from narthex to nave.

Of five circular monograms on this block, three are totally broken, one is damaged, and one intact (fig. L, 9-10).

ii. Left-hand end of cornice (presumed lintel-hood), found at Sarachane in 1960 (fig. C, pl. 113). Although there is no join, this may be from the same block as i above.

Ht. 0.39 m, l. 2.36 m. Monograms: five broken, the right-hand monogram intact (fig. L, 8).

b. Hood with cornucopiae.

i. Mus 71.118. A cornice or hood, of which three joining pieces were found by bulldozer in 1960 (fig. C, pls. 114-116, 120). The decoration is as follows: at the bottom a fillet with a simple rinceau of trilobate leaves; a roundel with kidney-shaped plants (derived from the ovolo), each consisting of three pairs of incurving sharply serrated leaves (in some cases the innermost pair have not been completed); on the horizontal part box-monograms in circular frames alternate with modillions, each of which carries a split-palmette supporting a stylized tree; the corona displays a bizarre, deeply undercut scheme. From a stunted base emerge to left and right two feathery leaves and above them, again to left and right, two cornucopiae; from these emerge sinuous stems, each with three strands: one turns in to link up with its neighbour, to support a pendant seven-lobed leaf between the two cornucopiae; another turns out to link up with its neighbour, to support a pendant seven-lobed leaf between each pair of cornucopiae; the third reaches the upper edge of the corona, where it emits a feathery in-turning leaf. Along the lower edge of the corona, between each pair of cornucopiae, runs a strand of ivy, with a leaf at each end and a third erect leaf at its mid-point, immediately beneath the pendant seven-lobed leaf. At the ends, the modillions are canted, and on the return to the wall the monogram is replaced by a circle containing a device with eight flaring arms.

The three pieces join to constitute one massive block, whose right-hand end is intact.

Ht. 0.44 m, combined l. 2.45 m, w. 0.945 m. The exact find-spot is not known. Of six monograms, three are destroyed, one damaged, and two intact (fig. L, 5-7).

ii. M7304. Fragment of corona and monogram, which joins i above (pl. 117).

Preserved ht. 0.36 m, w. 0.21 m; from level 472 (R/16).

iii. Large piece with three monograms, not joining i or ii, but possibly from same block (fig. C, pls. 118, 119). Ht. 0.44 m, l. 1.375 m, w. 0.94 m; found by bulldozer in 1960.

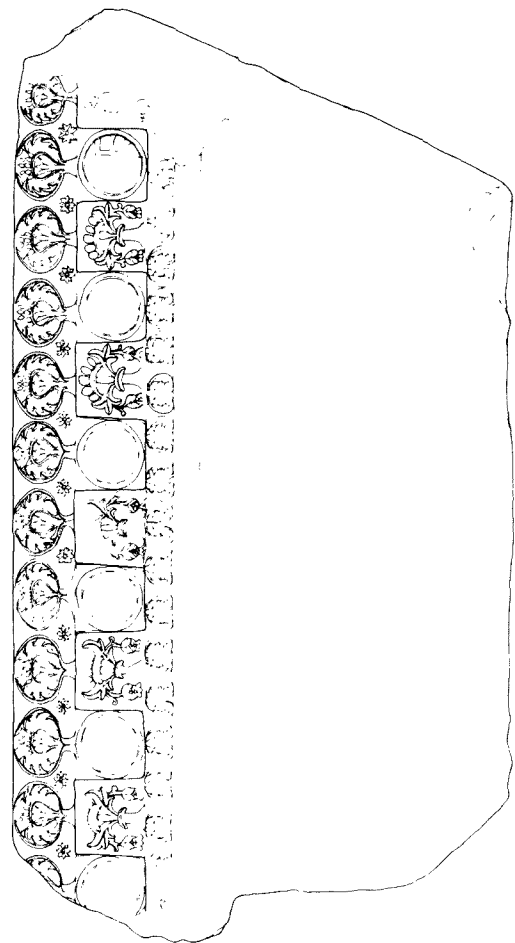
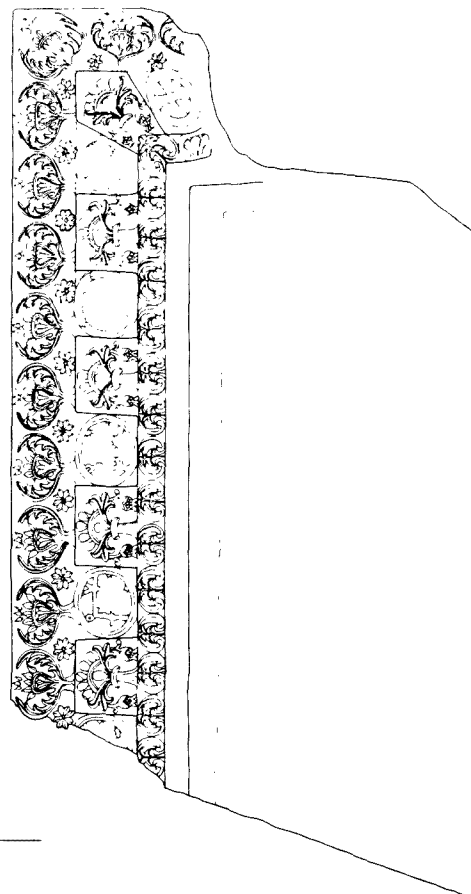
iv. Corner fragment with shell on canted modillion and one monogram (figs. C, L, 1).

Ht. 0.265 m, l. 0.785, w. 0.52 m; found by bulldozer in 1960. Monogram virtually intact.

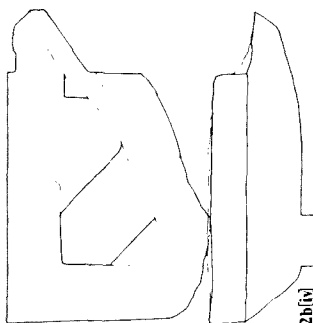
c. Cornice with quarter-round moulding, sometimes decorated with alternating crosses and deep scallop-



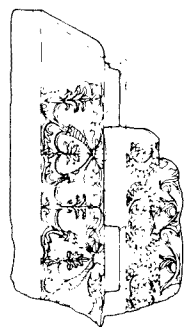
2a(i)



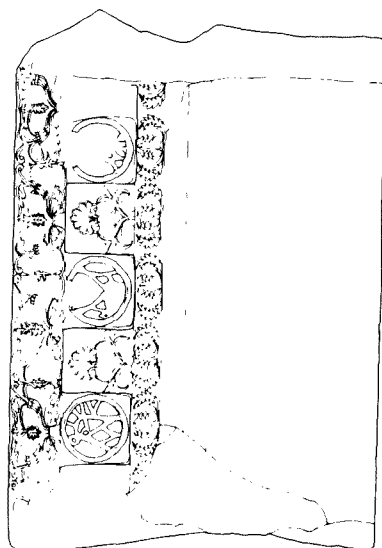
2a(iii)



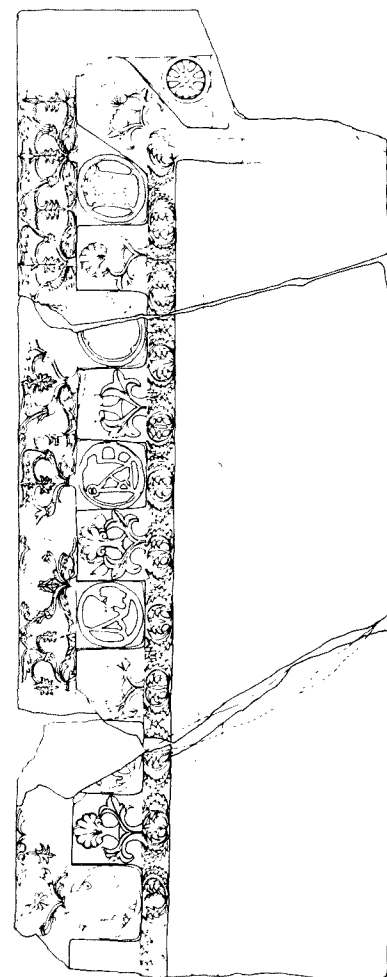
2a(iv)



2b(i)



2b(ii)



2b(iii)

FIGURE C. Selected Marbles (scale 1:20)

shells, sometimes plain. Some blocks have the moulding not only on the front, but also on the back, and thus penetrated the wall in which they were set, doing double-duty. In one decorated block there are traces of bright blue pigment behind the lobes of the intact shell and in the surrounding penannular groove.

i. M6931. Block with two sides roughly dressed, and a quarter-round moulding at each end, one decorated (as above), the other plain (fig. E).

Ht. 0.34 m, l. (of moulded faces) 0.84 m, w. (of soffit) 1.45 m, (overall) 2.01 m; in upper-storey brick pier found fallen in Y/18-19.

ii. M7215. Decorated at one end, plain moulding at other.

Ht. 0.30 m, l. 1.10 m, w. 2.03 m; from area RST/16-17, unstratified.

iii. M3794. Decorated. L. 0.51 m; from level 727 (U/15-16).

iv. M5156. Decorated (pl. 121). Ht. 0.31 m, l. 0.845 m, w. 1.29 m; provenance unrecorded.

v. Decorated. L. 0.60 m; from level 45 (KL/12-13).

vi. M2730. Decorated. L. 0.44 m; from level 737 (U/17-19).

vii. M2731. Decorated. L. 0.265 m; from level 737 (U/17-19).

viii. M2936. Decorated. L. 0.27 m; from level 677 (T/17-18).

ix. M3651. Decorated. L. 0.49 m; from level 725* (U/15-16).

x. M7429. Decorated. L. 0.36 m; from level 248 (OPQ/15-16).

xi. M5157. Plain. L. 0.87 m; provenance unrecorded.

xii. M5156. Plain (fig. D). L. 0.845 m; narthex, unstratified.

xiii. M6931. Plain. L. unrecorded; from level 1081 (Y/18-19).

Thirteen small fragments were also found, in levels 72, 87*, 94, 228, 252, 354, 629*, 737, 856 (two pieces), 1056, 1266*, and 1380* (M3286, 1758, 3028, 781, 7554, 7078, 7388, 3641, 3759, 3899, 10624, and 9361, 10527, respectively).

d. Chamfered impost with sprig and leaf.

i. M4145. Chamfered cornice or impost decorated with repeating motif of an upright nine-point sprig set against (or growing within) a nine-lobed "leaf", alternating with a sprig of nine small leaves (fig. D, pls. 122, 123). The lobes of the large "leaf" are deeply concave, somewhat like the flutes of a scallop-shell, and retain traces of bright blue pigment.

The right-hand part of the block is broken away; the decoration extends along the front of the block and the front half of the left side; where it terminates there is a vertical slot, and the rest of that side and the back are undecorated.

Ht. 0.26 m, base l. 1.335 m, w. 1.05 m; from level 859 (VW/17).

ii. M6780-6785. Block similar to above, with five small joining fragments.

Ht. 0.41 m, l. 0.64 m; all from level 252 (OPQ/16).

iii. M6801. Fragment: l. 0.68 m; from level 252.

iv. Fragment: l. 0.33 m; from level 252.

v. Fragment: l. 0.73 m; from level 252.

Whereas i was found in the atrium, in what appears to have been church destruction fill, ii to v were found in the fill (also church destruction?) of the passage beneath the nave.

e. Cornice with lotus and palmette.

Very sharply projecting chamfered cornice, decorated with stylized lotus and palmette, above circular monogram. The lotus flower, set upon five pellets, rises from a double stem, whose lower ends curl outwards to support the adjacent palmettes.

i. M2306, 2864. Two joining fragments which provide the scheme (pl. 126).

Combined l. 0.37 m; both from level 660* (T/15-16).

ii. M3086. Fragment with lotus above and part of circular monogram below.

L. 0.15 m, ht. 0.23 m; from level 660* (T/15-16).

iii. M3195. Fragment with palmette.

L. 0.071 m, ht. 0.026 m; from level 642 (S/17-19).

iv. M2916. Fragment with lotus.

L. 0.19 m; from level 641 (S/17-19).

All these pieces come from a small area, towards the middle of the narthex substructure; i and ii are from a secure Byzantine context, iii from a probable one.

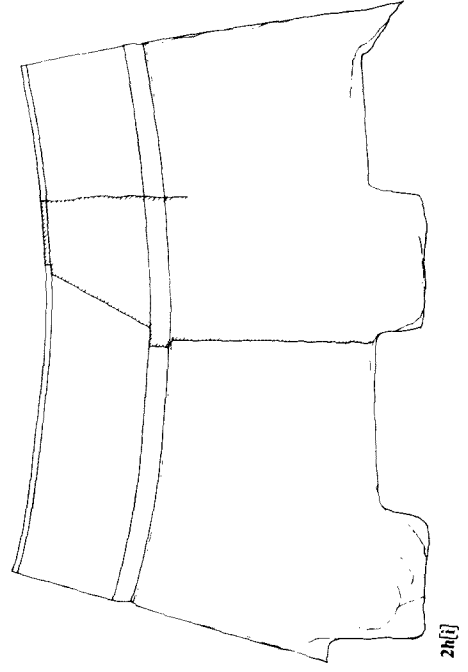
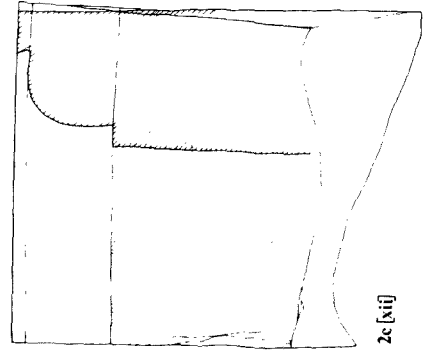
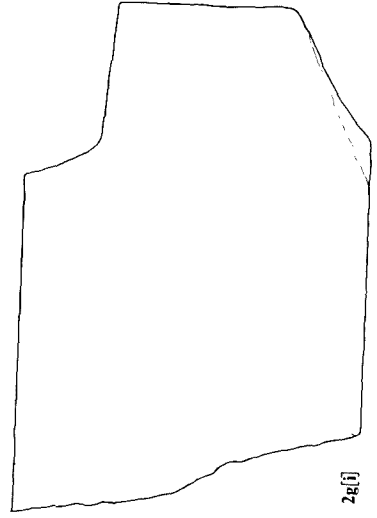
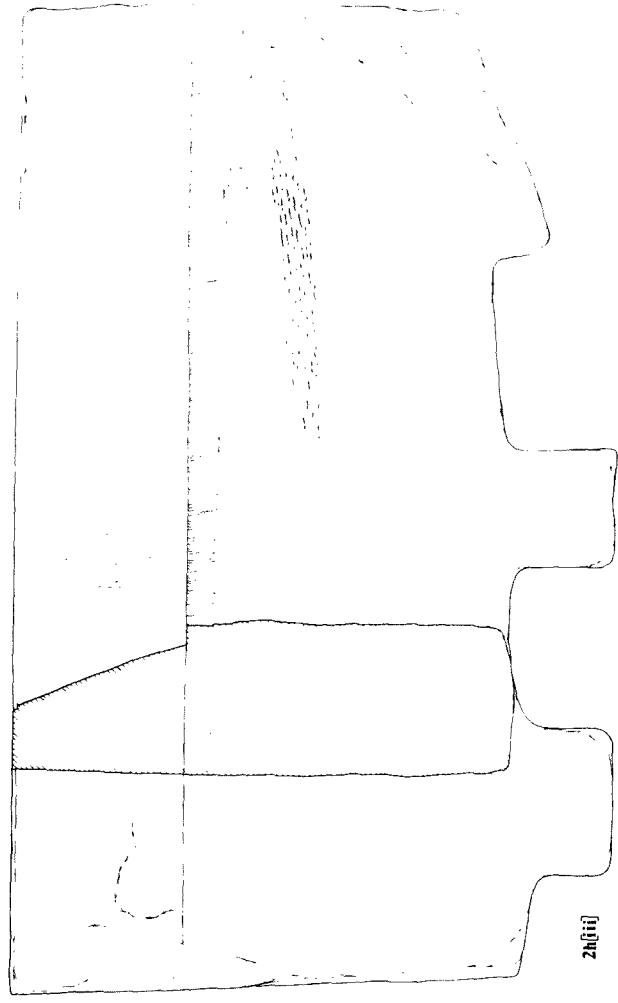
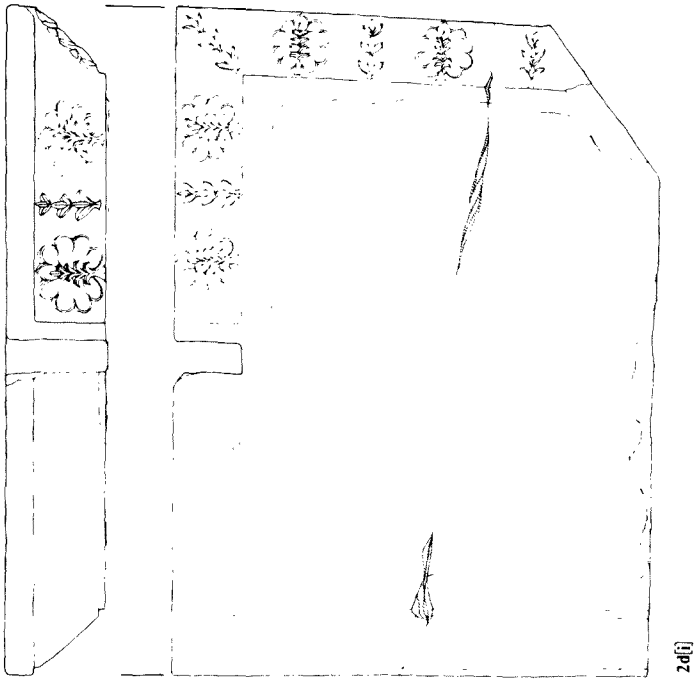


FIGURE D. Selected Marbles (scale 1:20)

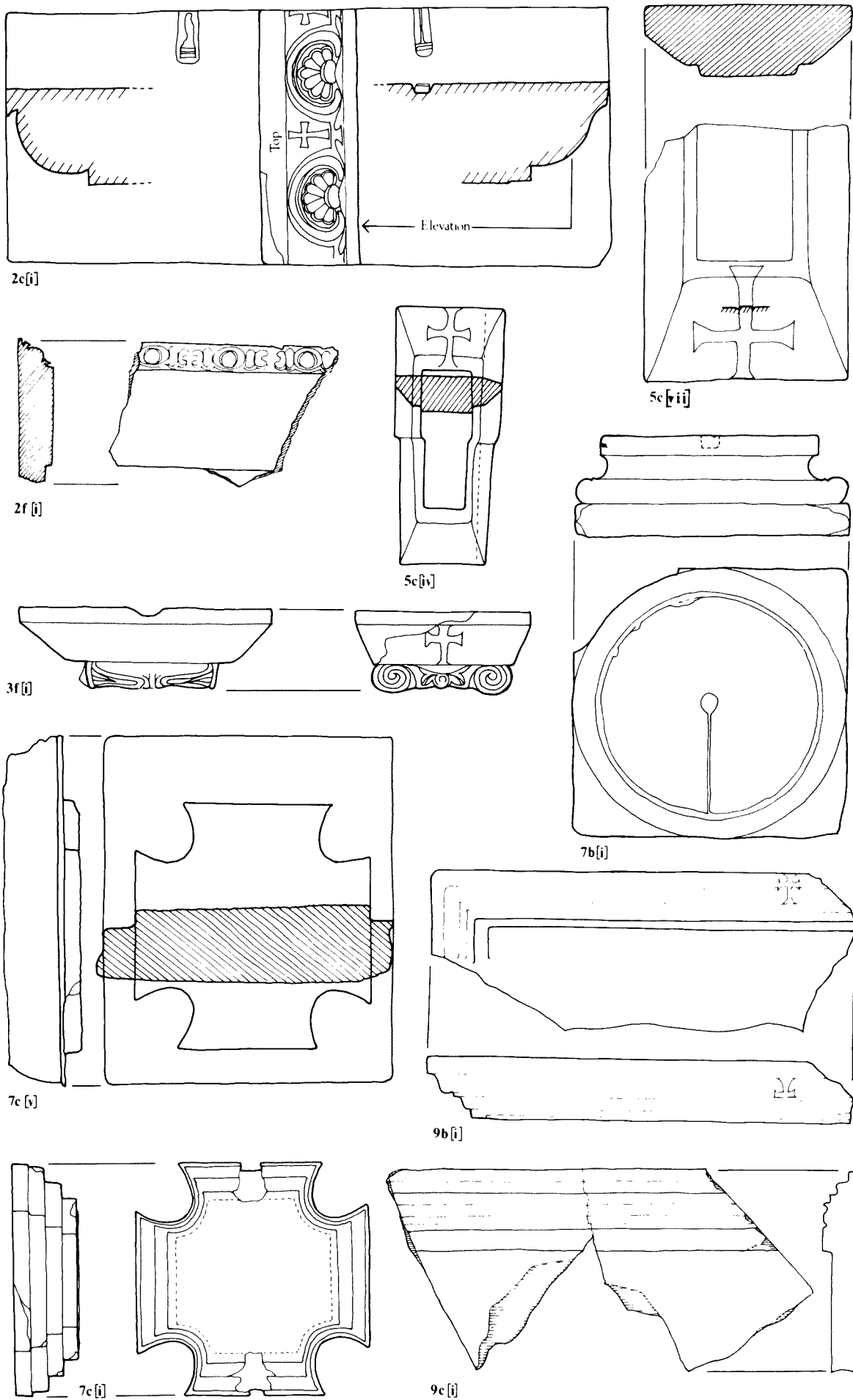


FIGURE E. Selected Marbles (scale 1:20)

f. Cornice with stylized egg-and-dart.

i. M6279. Chamfered cornice decorated with simple repeating motif: egg set in a ring between two vertical struts, which are backed each by a half-ring (fig. E). The carving is simple and stands out in underdrilled relief from the background. The surfaces of ring, strut, and half-ring are shallow concave. The egg is surrounded by comparatively deep cutting. Ht. 0.12 m, l. 0.68 m, w. 0.48 m; S/13 (level unrecorded).

ii. M6850. Similar, with right-hand end of block preserved (pl. 125).

L. 0.85 m, w. 0.62 m; level 308* (QR/12).

Both pieces were found in the north aisle, ii in church destruction fill.

g. Impost with vegetable decoration.

i. M4539. Engaged impost decorated with a repeated vegetable motif, made up of a split-palmette, which rises from the cleft between two caulicoli splayed to left and to right, from each of which issue two feathery leaves, one rising, the other falling, and an ivy leaf between (fig. D, pl. 127). One back-curling lobe on each of the lower leaves terminates in a pomegranate, while a lobe on each of the upper leaves similarly terminates in an ivy leaf. The caulicoli spring from a short "stem" consisting of two two-lobed leaves pointing downwards and outwards. The block, which is broken across the front, was decorated along one side, and evidently across the front; the other side was undecorated, except towards its front end. The carving is shallow.

Ht. 0.35 m, l. 1.20 m, w. 0.86 m; from level 1118 (bb/15-16).

Fragments of three similar pieces were found (M4112, 9082, 7718), also within the grand cistern (levels 1132, 1151, and 1297, respectively). This is also the general provenance of the similar frieze described below (15 c i), which must be associated with these imposts.

h. Plain cornice.

i. M6824. Chamfered cornice block of curved (concave) plan, undecorated (fig. D). The back of the block, to be built into masonry, is roughly cut with two broad lugs.

Ht. 0.36 m; l. 1.50 m (max., at back), 1.40 m (chord at wall face), 1.26 m (chord at front of projection); w.

(including lugs) 0.96-1.025 m. From R/12-13, unstratified.

ii. M3900. Fragmentary chamfered cornice block of curved (concave) plan, undecorated.

Ht. unrecorded, l. 0.53, w. 0.45 m; from level 829 (VW/14).

iii. M3600. Chamfered cornice block of straight plan, undecorated; three rough lugs at back (fig. D).

Ht. 0.40 m, l. 2.47 m, w. 1.53 m; from south side of church (level unrecorded).

i. Cornice with strapwork.

i. M97. Chamfered cornice, decorated with row of oblong panels containing strapwork design: four inverted V's contained within each other and forming a large triangle; step-motif to upper left and upper right (pl. 124). The V's are separated by very regular curvilinear channels, the carving is shallow, and the background is extraordinarily smooth and carefully finished. The effect is mechanical and unlike anything else at Sarāḡhane, and the piece may be Turkish.

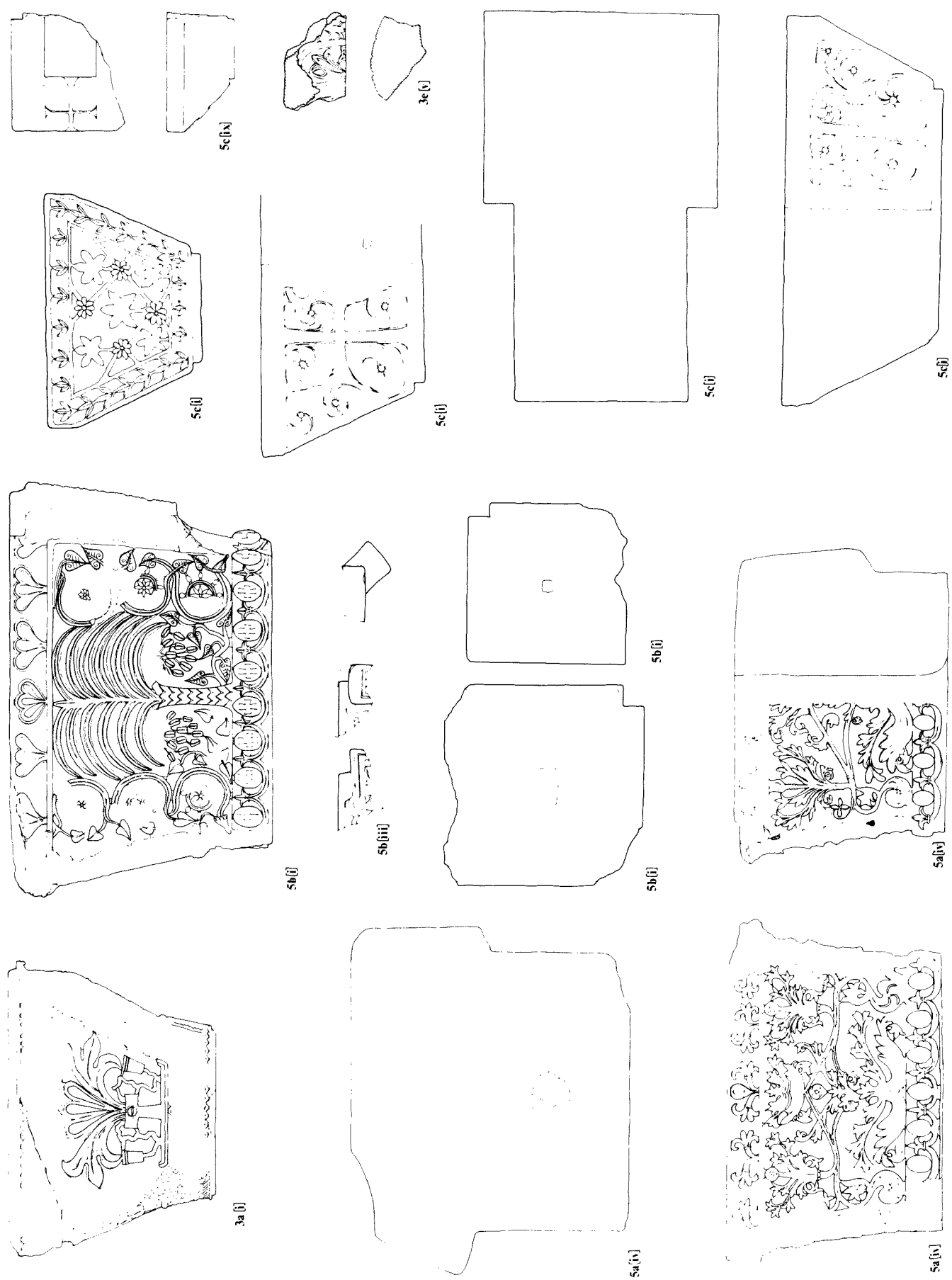
Ht. 0.375 m, l. 0.65 m, th. unrecorded; level 192 (topsoil in M/17).

One small fragment of similar design was found in 904, another in 58; all three contexts are Turkish, supporting the suggestion that the piece itself is Turkish.

3. COLUMN-CAPITALS**a. Basket-capitals with split-palmette.**

i. M6288, 6294. Basket-capital with undercut interlace framing a trapezoidal panel on each side (fig. F, pls. 128-129).² Each panel has a split palmette consisting of an erect, three-lobed element (palmette) between two sinuous leaves, rising from a T-shaped base; from the base also spring, to left and to right, two nervously undulating lines, which terminate in a sub-rectangular element. On one face the cross-bar of the base is inscribed with the letter Π, on the second face (to the right) with Θ, on the third and fourth decorated with a serrated rod. The interlace, although badly damaged, was meticulously executed. In several places the core of the capital retains the oxydized remains of broken drill-points (diam. 0.002 m).

Ht. 0.695 m, lower diam. 0.58 m, abacus 1.065 m square; from church destruction-level in T/14.



ii. M6117. Small fragment of palmette of similar capital, from level 1003 (X/12-14).

iii. M10309. Upper right corner of face of similar capital, with interlace of top border and uppermost lobe of palmette.

Ht. 0.22 m, l. 0.36 m, th. 0.13 m; provenance unknown.

b. Basket-capital with diagonal lattice.

i. M9116. Basket-capital, the body decorated with diagonal lattice, framing in each square an eight-armed cross (or, more correctly, a cross with diagonal rays) with delicately flaring arms (pl. 130). There is a large rectangular stud at each junction of the lattice and three small round ones on each lattice strip. The carving is deeply undercut, being attached to the core of the capital only at the centres of the crosses and the junctions of the lattice. The upper border, consisting of a formal interlace of opposed guilloche-like elements set with small flowers, is not undercut.

Ht. 0.59 m, lower diam. 0.42 m, abacus 0.86 m square; from the church destruction-layer in Z/17.

Of fifty other fragments recovered, three are without provenance and nine are from Turkish levels in the western part of the church and the narthex substructure; the rest are from the northern part of the atrium and the grand cistern, the majority being from Byzantine contexts in the latter (e.g., level 997*, 1005*, 1092*, [two pieces each], 1015*, and 1091*). Although many of these fragments joined with 3 b i, there seemed to be too many pieces for the one capital, and at least one more of this type is therefore probable.

c. Basket-capital with vase and vinestem.

i. M10704, Mus 6239. Basket-capital, badly damaged, but decorated on at least two faces with a tall, slender, stylized vase from which emerge symmetrically two twisting vinestems, within one of whose curves is set, not a leaf, but an eight-point star (pl. 131). The two surviving faces are separated by a broad vertical scar at the angle of the capital, indicating that there was openwork at the corners, and there are traces of cornucopiae from which this openwork sprang. There is no trace of the capital's upper and lower borders.

Ht. 0.485 m, lower diam. (approx.) 0.51 m; from O/9, unstratified.

d. Basket-capital with cornucopiae and acanthus.

i. Capital in the Archaeological Museum at Barcelona, which has been shown to have come from Saraçhane (pls. 132, 133).³ Its base moulding is decorated with large eggs (each with a Latin cross in relief) alternating with erect trilobate leaves, which are linked by a stem passing beneath the eggs. The crown moulding is decorated with a row of trilobate plants, each lobe with a pellet at its tip, and each plant having in addition two pendant pepperlike fruit. The principal design on each face of the capital consists of three superimposed cornucopiae set centrally, from which issue, splayed to left and to right, two elaborate sprigs of acanthus. The acanthus and much of the other carving is deeply underdrilled.

The corners of the capital have been badly damaged. Projecting bosses at the corners of the crown moulding have in each case been smashed, and twin stumps of cornucopiae above the base moulding beneath each corner are evidence of elaborate openwork up each corner to support the boss. The vertical bands that formed the background to this openwork have, in three out of the four cases, been reworked as myrtle-sprigs, and one of the broken bosses has been crudely reworked as a human head. There has also been some reworking of the plants on the main panel and on the crown moulding. The top surface of the capital has been hollowed out for use as a font.

Ht. 0.92 m, lower diam. 0.57-0.58 m, abacus 0.965 m square.

The identification was made by comparison with the small fragments excavated at Saraçhane that are listed below.

ii. M4449, 10744. Two joining fragments of upper left-hand corner of capital, unfinished; upper border with half plant on left, two whole plants, and pendant fruit of fourth plant (broken) on right, above five-lobed acanthus leaf in main panel (pl. 134). The pattern has been drilled but the background not yet struck away; the surface is smooth, with no indication yet of veins. Ht. 0.216 m, overall l. 0.285 m; from level 851 (W/15-16).

iii. M7006. Corner fragment, with broken boss and end plant of upper border preserved on each side. Ht. 0.17 m, l. of longer side 0.31 m; from level 1014 (X/16-17).

iv. M9042. Corner fragment, with broken boss and part of upper border preserved on each side; on one side the plants are slender and deeply underdrilled, on the other more chunky and in shallow relief.

Ht. 0.14 m, length of drilled side 0.23 m; from level 1264 (narthex).

v. M4911. Fragment of upper border with part of one plant (pl. 135, left).

Ht. 0.125 m, l. 0.13 m; from level 868 (VW/16-17).

vi. M4841. Fragment of upper border with part of one plant (pl. 135 right).

Ht. 0.11 m, l. 0.12 m; from level 865.

vii. Fragment of upper border with part of one plant.

Ht. 0.11 m, l. 0.14 m; provenance unknown.

viii. Fragment of upper border with parts of two plants; tooling on top surface indicates that this is near upper left corner of capital.

Ht. 0.12 m, l. 0.157 m; provenance unknown.

ix. M4205. Corner fragment with two underdrilled plants to right of broken boss, badly preserved traces of chunkily cut plant to left.

Ht. 0.16 m, l. of right face 0.23 m; provenance unknown.

x. M5208. Corner fragment, with broken plant and trace of end plant to left.

Ht. 0.155 m; provenance unknown.

In addition, fifty-four pieces were found of five-lobed acanthus leaf, of a type that decorates the main faces of the Barcelona capital but which is not attested on other sculptured items at Saraçhane.

e. Corinthian capitals.

Four Corinthian capitals were recovered, and 16 fragments; of the latter one was a substantial part of the body of a capital, while the rest were fragments of angle-volutes.

i. M7833. (pl. 136). Ht. 0.51 m, lower diam. 0.43 m; from level 1336* (Z/13-14).

ii. M7614. Ht. 0.30 m, lower diam. 0.29 m; from aabb/15-16, unstratified.

iii. M4114. Ht. 0.68 m, lower diam. 0.48 m; from level 910* (W/15-16).

iv. Two joining pieces of badly battered capital.

Ht. 0.26 m, surviving th. 0.27 m; provenance unknown.

v. M3901. Fragment of capital (fig F.).

Ht. 0.215 m, w. 0.34 m; from layer 859 (VW/17). Volute-fragments came from levels: 6, 86, 249, 332, 376*, 380*, 434, 540, 642 (three pieces), 927*, 929*, 937* (M3517, 1982, 7313, 7358, 7217, 6796, 6846, 6762, 2266, 2322, 2898, 8210, 7927, 10345, respectively).

f. Ionic impost capitals.

i. M4115. Capital with volute spirals with two downturned trilobate leaves flanking central round feature on each short side; a cross in light relief on impost on one short side (fig. E).

Ht. 0.26 m, impost 0.84 x 0.57 m; from level 910* (W/15-16).

ii. M6839. Capital with volute-spirals on the two short sides, the one with an ovolo-like decoration between them, the other with a (?) garland; each long side is decorated with two outturned trilobate acanthus leaves; impost plain (pl. 137).

Ht. 0.215 m, impost 0.71 x 0.43 m; from level 267 (OP/18-19).

iii. M10447. Capital damaged at one corner. Decorated ovolo and two volute spirals on each short side, two outturned leaves on each long side.

Ht. 0.29 m, abacus 0.88 x 0.595 m, underside 0.42 x 0.40 m; from level 1426.

iv. M2613. Small fragment with one volute. Preserved ht. 0.12 m, l. 0.40 m, w. 0.22 m; from level 721 (U/15-16).

v. M10300. Large fragment (approx. half of capital).

Ht. 0.275 m, preserved l. 0.56 m, and w. 0.46 m. From area Y/15-16, unstratified.

vi. M10360. Fragment (approx. one-quarter). Preserved ht. 0.16 m, l. 0.26 m, w. 0.28 m. From WX/18-19, unstratified.

4. COLUMNS

a. Inlaid columns.

i. M387, Mus 5680. Upper part of column, cut with an elaborate inlay of hexagons and squares (pl. 140). Squares of amethyst are framed by triangles and trapeziums of opaque green glass to form hexagons; there are canted squares of amethyst outside the hexagons, and diagonal runnels have strips of gold glass. Some of

the inlay was found still in place, embedded in its original plaster. The column diminishes in diameter, and there is a rough roundel at the head of the decoration and a narrow fillet above that.

Ht. 1.01 m, diam. at top 0.36 m, lower diam. 0.41 m; ht. of roundel 0.035 m, of fillet 0.055 m; from level 165 (M/14).

ii. M198, 199, Mus 5681, 5682. Middle section of column, as i; two joining fragments, no inlay surviving. Ht. 1.04 m, diam. 0.41-0.43 m; from level 165 (M/14).

iii. M847, Mus 71.121. Middle section of column, as i; much inlay surviving, including gold-glass strips. Ht. 1.23 m, diam. 0.40-0.41 m; from level 169* (M/14).

iv. Mus 71.122. Upper part of column, as i; no inlay surviving (pls. 138-140). Ht. 1.44 m, max. diam. 0.41 m; from level 94 (L/14-15).

v. Mus 71.123. Lower part of column as i, but decoration terminating at narrow fillet, below which surface of shaft roughly cut back; bottom end of shaft evidently broken (pl. 140). Ht. 1.88 m (of which 0.35 uncarved), max. diam. 0.40 m; from level 94 (L/14-15).

vi. M1959. Small fragment (pl. 140). Dimensions unrecorded; from level 50 (K/13-14).

vii. M2240. Small fragment. Ht. 0.20 m, w. 0.30 m; from level 837* (V/15-16).

b. Columns of Proconnesian marble.

Some ninety-five fragments were found of columns of Proconnesian marble, none substantial and the overwhelming majority simply slivers from which it was barely possible even to estimate the column's original diameter. Where rough estimates were possible, these did seem to be of two main categories, those of ca. 0.30-0.40 m and those of ca. 0.50-0.70 m in diameter. Examples of the former were in the following levels: 252, 376*, 600, 642, 660*, 671, 674, 830*, 833*, 869*, 873*, 887, 906, 997* (two examples), 1005*, 1045, 1059, 1094* (two), 1151* (two), 1157*, 1207, 1297*, 1327*, 1333; and of the latter in the following: 94, 276*, 596, 642, 703, 870*, 947, 1003, 1059, 1092*, 1112*.

The following are selected larger items:

i. M9080. Shaft ht. 1.40 m, diam. 0.32 m (incl. fillet 0.34 m); from level 1157* (Z/18-aa/17-18 area).

ii. M5158. Shaft ht. 0.94 m, diam. 0.35 m; from level 869* (VW/16-17).

iii. M5159. Shaft ht. 1.26 m, diam. (incl. fillet) 0.375 m; from level 1094* (Z/16-17).

iv. M6281. Shaft ht. 0.76 m, diam. (incl. double fillet) 0.47 m, larger fillet 0.09 m wide, smaller 0.02 m; dowel-hole 0.07 m deep, 0.065 m diam.; from S/13.

v. M4542. Fragment of shaft (semicircular section). Ht. 0.65 m, diam. ca. 0.48 m; very rough-hewn, no dressed surface; from level 828 m (VW/14).

vi. Shaft ht. 0.95 m, diam. (incl. double fillet) 0.55 m, dowel-hole 0.07 m diam. and depth; provenance unknown.

vii. Shaft ht. 0.27 m, est. diam. (incl. fillet) ca. 0.60 m; from level 593* (T/14).

c. Granite columns.

Only x and xi were excavated archaeologically, and both were in Turkish contexts; the others had been deposited in the southern part of the public gardens that overlay the church and may have been excavated mechanically elsewhere in the Saraçhane area. Their connection with the church is thus dubious.

i. M2732. Upper part of granite column. Ht. 3.24 m, lower diam. (incl. fillet) 0.70 m, upper diam. 0.645 m, fillet at top 0.06 m wide and ca. 0.03 m thick; circular dowel-hole in top surface 0.06 m in diam. and depth.

ii. M2733. Upper part of granite column. Ht. 1.63 m, upper diam. (incl. fillet) 0.60 m, lower diam. 0.63 m, fillet at top 0.09 m wide, ca. 0.015 m thick; two lead-pouring channels (at right-angles to each other) to circular dowel-hole 0.06 m in diam. and depth.

iii. M2734. Middle section of granite column. Ht. 1.95 m, diam. 0.65 m.

iv. M2735. Lower part of granite column. Ht. 1.85 m, lower diam. 0.68 m (incl. fillet), upper diam. 0.58 m; double fillet (upper: w. 0.025 m, th. 0.01 m; lower: w. 0.08 m, th. 0.03 m) at base; circular dowel-hole 0.05 m in diam., 0.04 m deep.

v. M2737. Lower part of granite column.
Ht. 2.45 m, lower diam. (incl. fillet) 0.71 m, upper diam. 0.61 m; fillet at base w. 0.11 m; circular dowel-hole 0.06 m in diam., 0.05 m deep.

vi. M2736. Upper part of column.
Ht. 3.03 m, upper diam. (incl. fillet) 0.64 m, lower diam. 0.61 m; double fillet (upper: w. 0.025 m, th. 0.012 m; lower: w. 0.11 m, th. 0.013 m) at base; circular dowel-hole 0.06 m in diam., 0.05 m deep.

vii. Fragment: ht. 0.48 m, upper diam. 0.40 m, lower diam. 0.42 m.

viii. Fragment: ht. 0.68 m, diam. ca. 0.30 m.

ix. Fragment: ht. 1.00 m, diam. 0.38 m.

x. M5799. Fragment: ht. 0.59 m, diam. 0.385 m; from level 887 (V/18-19).

xi. M8319. Fragment: l. 0.68 m, diam. 0.32 m; dowel-hole in end, no fillet; from level 1290 (Y/13).

d. Columns of various coloured marbles.

i. M4209. Small fragment of green breccia, est. diam. ca. 0.40 m; from level 1106 (bb/15-16).

ii. M6859. End, with fillet, of small column of brown conglomerate.
Ht. 0.37; diam. (incl. fillet) 0.30 m; from level 390 (R/9-11).

iii. M7880. Fragment of small column of orange-brown marble.
Ht. 0.07 m, est. diam. ca. 0.30 m; from level 1294 (Y-bb/13-15 area).

iv. M9230. Fragment of end, with fillet, of small column of dappled Dokimian marble.
Ht. 0.115 m, est. diam. 0.30 m; from level 1380* (Y-bb/13-15 area).

v. M9778. Fragment of column of dappled Dokimian marble.
Ht. 0.26 m, est. diam. 0.30 m; from level 1345 (Z/14), with five smaller fragments.

vi. M10316. Fragment of column of *giallo antico*, cut for reuse.
Ht. 0.57 m, est. diam. 0.45 m; atrium area, unstratified.

5. PIER- AND PILASTER-CAPITALS

a. Capitals of the Venice Piazzetta type.

i. M371, Mus 5679. Pier capital,⁴ whose base moulding is decorated with large eggs alternating with trilobate leaves, which are linked by a stem passing beneath the eggs; its upper carved moulding is decorated with a series of simple split-palmettes, and above this is a plain, slightly concave element, like an impost (pls. 141, 142). The main panel on each side has an elaborate scheme of extremely stylized acanthus, with a central vertical stem from which emerge symmetrically to left and right sinuously undulating stems; from the latter springs a further stem with two tendrils, one of which encloses a vine leaf, the other a six-point star. To lower left and lower right, on the central stem, and at the topmost tip of the two flanking stems are helical elements, five in all. The two principal flanking stems are apparently supported from the main stem by two descending rods, which dominate the scheme incongruously like an inverted V. At each of three corners of the capital there was a projecting boss at the level of the upper decorated moulding, supported by openwork springing from a pair of cornucopiae beneath the corner; at the fourth corner there is a small rectangular rebate, from base to top, and there were two pairs of cornucopiae from which sprang two systems of openwork, separated by a groove and supporting two canted bosses. The openwork in each case has been smashed and is attested by a broad scar.
Ht. 0.90 m, base 0.94 m square with 0.08 m rebate at one angle; from level 179 (M/15-16).

ii. Capital of western pier in Venice Piazzetta (pl. 144)⁵. As i, but with impost that appears to be medieval; also medieval is some carving at the corners of the capital, to conceal the scar left by broken openwork. The principal publication (M. Kalligas, *Οἱ πέσσι τῆς Πτολεμαῖδος*, *Arch. Eph.* [1938, publ. 1940], pp. 70-99) gives one set of measurements for this and the adjacent capital: ht. 0.97 m, base 0.94 m square.

iii. Capital of eastern pier in Venice Piazzetta (pl. 143). As ii above.

iv. M6843, Mus 71.117. Engaged pier-capital with decoration similar to that of pier-capital 5 a i, but without the impostlike element and the rebate (fig. F, pls. 145, 146). The engaged portion is at an angle to the exposed, implying some change of direction (e.g., an *excedra*).

Ht. 0.76 m, base w. 1.00 m, base projection from wall 0.50 m; from level 961 (W/18-19).

b. Date-palm capital.

i. M6876. Pier-capital, decorated on each side with central date-palm flanked by a twisting plant with spade-like leaves and eight-point flowers; upper border a row of three-lobed features, lower border a scheme of protuberant eggs (each with a Latin cross in light relief) alternating with trilobate leaves, which are linked by a stem passing beneath the eggs (fig. F, pls. 147-150). Three upper corners each had a boss, supported by openwork springing from pairs of cornucopiae; the fourth corner has, like 5 a i, a rebate, with two pairs of cornucopiae, each with its openwork supporting a canted boss.

Ht. 0.93 m, base 1.13 m square, upper surface 1.30 x 1.33 m; from level 245* (OPQ/15-16).

ii. M4408. Fragment of lower part of thin pilaster-capital, of same design as i above.

Ht. 0.32 m, w. 0.28 m, th. unrecorded; from level 668 (T/16-17).

Nine small pieces of upper border assignable to capital(s) similar to i were found; one was without provenance, the rest were from levels 165, 197, 244*, 275, 465*, 476*, 660*, 1148 (M263, 4487, 7035, 824, 7599, 7540, 1894, 8808, respectively).

iii. M2223. Fragment of rectangular canted boss, evidently from pier-capital similar to i above; part of upper border of capital (three-lobed elements), and traces of openwork on sides and front of boss, which is otherwise completely hollowed beneath (fig. F).

Ht. 0.20 m, max. l. 0.25 m, w. of boss 0.12 m; from level 642 (S/17-19). Similar piece (M743) from level 330 (Q/12-13).

c. Oblong capitals.

i. M6853. Large oblong capital, decorated on front and on the front half of each side; for the rear half of each side the width of the block is reduced, and these parts and the rear face are undecorated (fig. F, pl. 151). On the front, a border of erect, simple three-leaf plants surrounding the main trapezoidal panel, which has a scheme of five upright vine leaves set separately within the panels of a simple lattice, with small six-petal flowers covering the junctions of this lattice. The carving is unfinished, inasmuch as the leaves in particular have

been left quite flat and smooth. On each side, a cross has been sketched in light relief with a helical whorl in each of its four quadrants; these too are unfinished.

Ht. 0.53 m, l. 1.40 m, w. 0.82 m (front), 0.61 m (rear); from level 252 (OPQ/16).

ii. M7186. As i. Ht. 0.51 m, l. 1.48 m, w. 0.86 m (front), 0.62 m (rear); from level 252.

iii. M10310. Fragment of top right-hand corner of front of pier-capital of type i; acute angle of main panel and border with two plants, on the adjacent face one element of the helical motif.

Ht. 0.25 m, w. 0.18 m, th. 0.20 m; from atrium area, unstratified.

iv. M7820. Capital with diminished rear width (as i above), decorated with cross in relief at each end (fig. E).

Ht. 0.27 m, upper w. 0.37 m, upper l. 0.83 m; from level 1299 (Y/15).

v. M7826. Capital as iv, but with cross at front end only.

Ht. 0.15 m, upper rear w. 0.355, l. 0.86 m; from level 1339 (Z/13).

vi. M7834. Capital as v.

Ht. 0.10 m, upper front w. 0.35 m, l. 0.86 m; from level 1336* (Z/13-14).

vii. M9056. Fragmentary capital, end with cross preserved.

Ht. 0.14 m, l. 0.31 m; from level 1304 (Y/15).

viii. M4878. Fragmentary capital, as vii (fig. E).

Ht. 0.27 m, upper w. (incomplete) 0.28 m, l. 0.43 m; from level 833* (VW/14-15).

ix. M4879. Fragmentary capital as vii (fig. F).

Ht. 0.255 m, upper w. 0.38 m, l. 0.395 m; from level 833* (VW/14-15).

x. M7722. Fragmentary capital with undecorated end.

Ht. 0.12 m, upper w. 0.30 m, l. 0.44 m; from level 1299 (Y/15).

xi. M7704. Plain capital with cyma reversa profile.

Ht. 0.24 m, upper w. 0.30 m, l. 0.64 m; from level 1048* (XY/16-17).

xii. Fragmentary capital, end with cross preserved.

Ht. 0.23 m, upper w. 0.68 m, l. 0.86 m; provenance unknown.

d. Pilaster-capital with openwork.

i. M2865. Lower right-hand corner of rectangular panel, decorated with a frame in relief containing the broken remains of undercut strapwork surrounding some smoothly dressed area, of which a small part survives (pl. 153). The panel is roughly dressed behind and was evidently to be set into a wall. It may have carried the design of capital 3 a i above.

Ht. 0.29 m, l. 0.245 m, th. 0.90 m (max.), 0.68 m (min.); from layer 51 (K/13-14).

e. Pilaster-capital with acanthus.

i. M246. Lower right-hand corner with broad acanthus leaf growing out of bottom edge and a longer leaf growing obliquely above it out of right-hand border, which inclines slightly outwards (pl. 152). The leaves are carefully chiselled, with drill-holes between the lobes, but the style is quite different from (and earlier than?) the principal carving of the church.

Ht. 0.15 m, w. 0.08 m; from level 126 (M/9).

6. PIERS AND PILASTERS**a. Venice Piazzetta type.**

i. Western Pier in the Venice Piazzetta (fig. L, 12, 13, pl. 154).⁶ Upper border of diagonal fret; upper half of shaft with a large, richly decorated panel on each face, lower half plain (except for fillet at bottom) on three sides, and with a simple rectangular panel with cross-and-orb on the fourth. On two sides (one with the cross-and-orb) the decoration is a formal scheme of two similar designs, set one above the other. In each design a circular monogram is set centrally between a large pendant vineleaf above and an erect vineleaf below; to left and to right are vertical scrolls of, alternately, smaller acanthus leaves and bunches of grapes. On the other two sides the design consists of a cantharus from the pedestal of which spring two leaves and from the mouth of which rise two thick vinestems framing a large, erect vineleaf and coming together to support a pomegranate at the top; from these stems spring, alternately, bunches of grapes and vineleaves. There is a rebate along one edge of the shaft, corresponding with the rebate in pier-capitals 5 a i, 5 a ii, and 5 a iii. The monograms on the south side are intact; those on the north side are destroyed.

Ht. 4.01 m, th. at base 0.99 x 0.96 m, shaft diminishing by 0.13 m.

ii. Eastern pier in the Venice Piazzetta (fig. L, 12-13, pl. 155). As i above, but with slightly different upper monogram on the south side (fig. L, 14); the other three monograms are destroyed.

iii. M3727. Upper corner of pier of identical type (fig G, pl. 156). Upper border of diagonal fret; left (better preserved) face has central pomegranate springing from large luxuriant vinestem with grapes and leaf; right face (badly damaged) has smaller leaf encircled by vinestem. Ht. 0.615 m (left face), max. w. 0.47 m, w. from centre of pomegranate to outer edge 0.395 m; right face w. 0.32 m; from level 666 (TU/15-16).

iv. Fragment of engaged pilaster, built into Turkish foundations about 100 m south-west of the south-west corner of the church and discovered by Dr. N. Asgari in a modern construction-trench in August 1979 (pl. 157). The decoration, with crowning strapwork and main panel with twisting vine and erect pomegranate, is a compressed version of that on the freestanding piers in Venice.

Ht. 1.17 m, w. 0.48, upper border 0.11 m wide, lower 0.05 m.

b. Piers with rosettes.

i. M2716. Upper corner of pier (fig. G, pl. 158). Moulding of flat diagonal strapwork above a horizontal and vertical cavetto border with rosettes, enclosing main panel with thick twisting stem. The rosettes have each an outer row of eight petals and an inner row of four; in the upper border, the innermost of the four preserved rosettes has also an intermediary row of seven petals.

Ht. 0.54 m, w. 0.44 m; found within axial passage, beside ambo-foundation.

The strapwork may be resolved into a row of Δ -shaped elements, to each of which two rosettes correspond. Although it was at first thought that the width of the pilaster could be restored as four Δ -shaped elements or eight rosettes ($0.44 \times 2 \text{ m} = 0.88 \text{ m}$, roughly corresponding to the upper width of the so-called *pilastri acritani*), it was later realised that the width must have been five Δ -shaped elements or ten rosettes ($0.44 \times \frac{5}{2} = 1.10 \text{ m}$), exactly corresponding to the base width of the palm-tree pier-capital (5 c i). This pier was significantly wider than those of the *pilastri acritani*, and the extra width required the insertion of a vertical border; there were thus not two but four rosettes with intermediary petals.

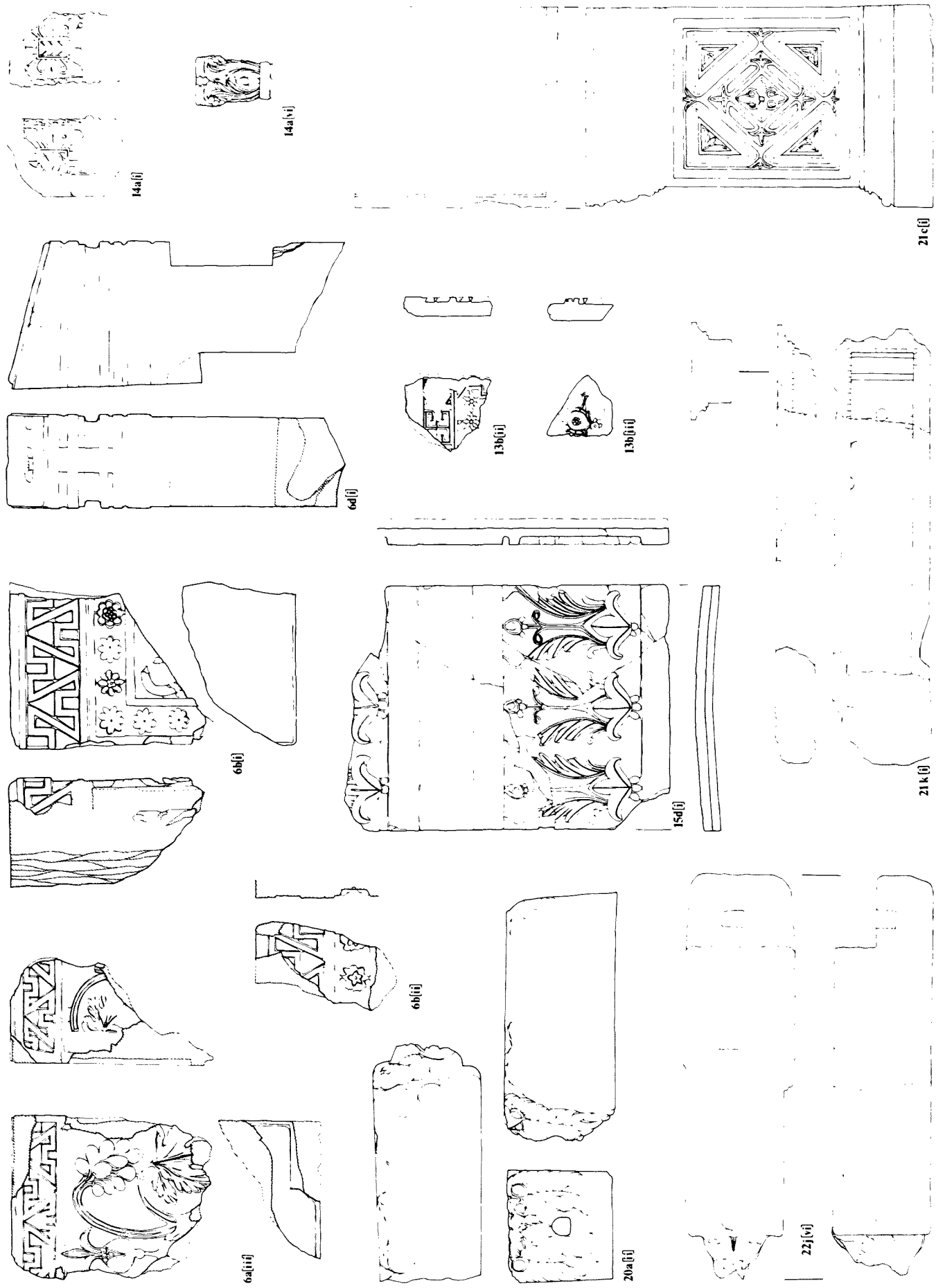


FIGURE G. Selected Marbles (scale 1:20, except 6 a iii, 6 b i, and 6 b ii at 1:16)

ii. M2717. Fragment of top of pier, with diagonal strapwork above rosette-border (fig. G).
Ht. 0.36 m, w. 0.21 m, th. unrecorded; from level 94 (L/14-15)

c. Pier with countersunk panel.

i. M3386. Lower part of rectangular orthostat of unknown function; front decorated with countersunk oblong panel with concave end and polished, and the forward part of each side is also polished, the rear part being stepped back and roughly tooled; a plain base moulding is carried around the front of the block, as far as the rebate on each side (fig. H, pl. 159).
Ht. 1.27 m, W. 0.40 m, d. 0.82 m; find spot unrecorded.

d. Pier with oblique upper surface.

i. M4294. Upper part of rectangular post with mouldings and oblique upper surface (to carry voussoir?) with rectangular dowel-hole; the shaft below the mouldings has been crudely cut back on two sides (fig. G).
Ht. 0.84 m, w. 0.27 m, th. 0.43 m; M/9, level unrecorded.

e. Fluted pilaster.

i. M10093. Fragment of upper or lower part of fluted pilaster; the flutes (parts of three and one-half are preserved) are of ionic type, stopping short before the edge of the slab and having rounded ends.
Ht. 0.09 m, w. 0.12 m, th. 0.02 m; level 465* (R/16).

7. COLUMN-SEATINGS AND BASES

a. Column-seatings.

i. M4501. Large intact block with off-centre circular sinking (diam. 0.90 m, depth 0.02 m) in upper surface. Rebate of differing widths and depths (0.05-0.15 m) on three sides.
1.40 x 1.50 x 0.55 m thick; from level 745* (UV/17).

ii. M4502. Part of large block with circular sinking (diam. 0.72 m, depth 0.02 m); at centre dowel-hole (diam. 0.24 - 0.12 m, depth 0.12 m); nearly half missing (fig. I). On the three preserved sides, rebates 0.28 m, 0.18 m, and 0.13 m deep, respectively.
1.46 x 0.80 x 0.60 m thick; find spot unrecorded.

iii. M6284. Part of large block with circular sinking (est. diam. 0.76 m, depth 0.02 m), approximately one-

quarter preserved (fig. I). One side slightly convex in plan, with rebate 0.04 m wide at 0.16 m from top; the other preserved side is radial to this curve.
0.78 x 0.59 x 0.28 m thick; from level 600 (T/14).

iv. M6290. Part of large block with edge of circular sinking (depth 0.015 m) preserved along break; reddish plaster in sinking (fig. I). Of the three dressed sides, one is slightly concave in plan, and the opposite one distinctly convex, with rebate cut back to a depth of 0.12 m.
1.06 x 0.95 x 0.27 m thick; T/13-14, unstratified.

v. M6291. Part of large block with circular sinking (diam. 0.773, depth 0.015 m) (fig. I). Of three dressed sides (the fourth is broken), one is concave in plan, the opposite one convex, and the third side is approximately radial to the two curves. The convex side is cut back 0.12 m to a rebate. A short (0.065 m) straight incision on the upper surface of the block, on the circle's axis, is a setting-out line.
0.98 x 0.87 x 0.30 m thick; T/13-14, unstratified.

vi. M6293. Large block (two joining pieces) with circular sinking (diam. 0.085 m, depth 0.02 m); pitted surface in sinking and traces of pink plaster (fig. I). Setting-out lines just visible on circle's axes. Rebate on three sides of block, cut back 0.065-0.09m.
1.25 x 1.70 x 0.25 m; level 594 (T/13-14).

vii. M6322. Part of large block with rough raised ring 0.08 m wide enclosing a circle 0.72 m in diameter (fig. I). The two long sides are concave and convex in plan, respectively; the surviving short side is cut radially. There are no rebates on the sides.
1.15 x 0.89 x 0.32 m thick; T/13-14, unstratified.

viii. M8121. Large block with circular sinking (diam. 0.765 m, depth 0.03 m); at centre, irregular dowel-hole, 0.135 m deep. Two rectangular cavities on top surface extend on to circular sinking. Rebates on all four sides.
1.15 x 0.86 x 0.53 m thick; from Turkish level in 0/10-11.

ix. M6825. Large plain block, two long sides concave and convex in plan, respectively, two ends approximately radial (fig. I). Evidently a space-filler between two with circular sinkings. On the top surface are twelve small rectangular sinkings, ca. 0.02 m square and 0.005 m deep. Three are along the inner edge, but otherwise they appear to be set at random.
Inner chord 0.965 m, outer chord 1.225 m, w. 0.88 m, th. 0.30 m; from R/12-13.

b. Column-bases of orthodox types.

i. M2738. Column-base of Attic type: square plinth supporting torus, scotia, and torus of smaller diameter; central dowel-hole (diam. 0.05 m, depth 0.04 m) and pouring-channel cut in top surface (fig. E).

Plinth 0.88 m square, ht. 0.36 m, upper diam. 0.70 m; no provenance (found in 1960).

ii. M319. Column-base: below, three roundels separated by two scotiae; above, two fillets of lesser diameter separated by scotia, and crowning fillet (pl. 160).

Ht. 0.30 m, upper diam. 0.54 m; from level 181 (M/15).

iii. M2895. Part of column-base: upper surface of large torus decorated with simple wreath, supporting three fillets and a rougher, narrower fillet (pl. 161).

Preserved ht. 0.25 m, w. 0.58 m; find spot unrecorded.

iv. M2739. Column-base of Attic type.

Plinth 0.97 m square, ht. 0.34 m, upper diam. 0.75 m; no provenance (found in 1960).

v. M5926. Column base of Attic type.

Plinth 0.674 m square, ht. 0.272, upper diam. 0.48 m; from layer 519 (STU/12).

c. Cruciform bases.

i. M7832. Cruciform base made up of four stepped members; the form is that of an octagon whose oblique sides are deeply concave (fig. E). The top surface, which has no dowel-hole, is very roughly dressed. A rough slot (w. 0.06–0.10 m) in the centre of each of two opposite sides is cut back into all four steps.

Ht. 0.24 m, w. 0.80 x 0.78 m; from level 1342* (Y/13).

ii. M9022. Cruciform base as above, but slot (w. 0.04 m) on one side only, cut into third step and back to riser of fourth.

Ht. 0.22 m, 0.78 m square; from level 1009* (X/15).

iii. M10397. Part of cruciform column-base: five steps supporting narrow, plain circular member (est. diam. 0.45 m) with circular dowel-hole (depth 0.06 m) at centre; slot (w. 0.08 m) in bottom step.

Ht. 0.29 m, l. 0.50 m, w. 0.35 m; from bb/18–19, unstratified.

iv. Small fragments of similar bases were found in the following contexts: 600* (T/15–16), 692 (U/13–14) (two fragments), 833* (VW/14–15), 908 (W/15–16),

997* and 999* (X/12–14), 1070* (Y/17), 1072 (Y/15–17), 1109* (bb/15–16) (two fragments), 1112* (aabb/15–16) (two fragments), 1131* (aa/15–16), 1132 (aa/17–18), 1148 (aa/17), 1205 (bb/18–19), 1266* (Narthex F), 1320* (aa/13) (M1916, 1784, 1861, 5566, 3956, 4800, 4718, 7771, 10145, 5671, 5162, 5228, 4111, 9459, 9332, 9100, respectively).

v. M8186. Large oblong slab with cruciform seating in relief (0.06 m), matching i and ii above, which, or the like of which, it presumably supported (fig. E). Very roughly cut, with rebate at depth of 0.06 m on one long side.

L. 1.175 m, w. 0.975 m, total th. 0.22 m; from western part of site, unstratified.

d. Column-bases with stepped hexagons.

i. M10388. Column-base: square plinth, supporting a narrow, circular element, four diminishing stepped hexagons, and another narrow circular element (pl. 162). On the two sides of the hexagons which are parallel with the plinth-sides, a rough uncut band (w. 0.12 m) rising from a shallow slot of similar width in the lower circular member. In the upper surface there is a feeder-groove and a central circular sinking (diam. 0.09) containing lead, which retains the impression of a peg of oblong section (0.025 x 0.04 m; 0.045 m deep). Rough work, curiously unfinished.

Base 0.97 m square, ht. 0.60 m, upper diam. 0.66 m; found *in situ* in circular structure in X/19.

e. Column-bases with quarter-round moulding.

i. M4365. Column-base; square plinth, quarter-round moulding, and crowning fillet; central dowel-hole and pouring-channel.

Plinth 0.72 m square, ht. 0.26 m; from aa/15–16.

f. Pilaster-bases.

i. M8256. Pilaster-base with narrow mouldings: (from below) rectangular element, concave groove, roundel, narrower fillet, scotia, two narrow fillets.

Ht. 0.15 m, w. 0.37 m, th. 0.05 m; from level 1243* (Narthex D).

8. THRESHOLDS**a. Thresholds.**

i. M3387. Large threshold, approximately half missing (fig. I, pl. 163).

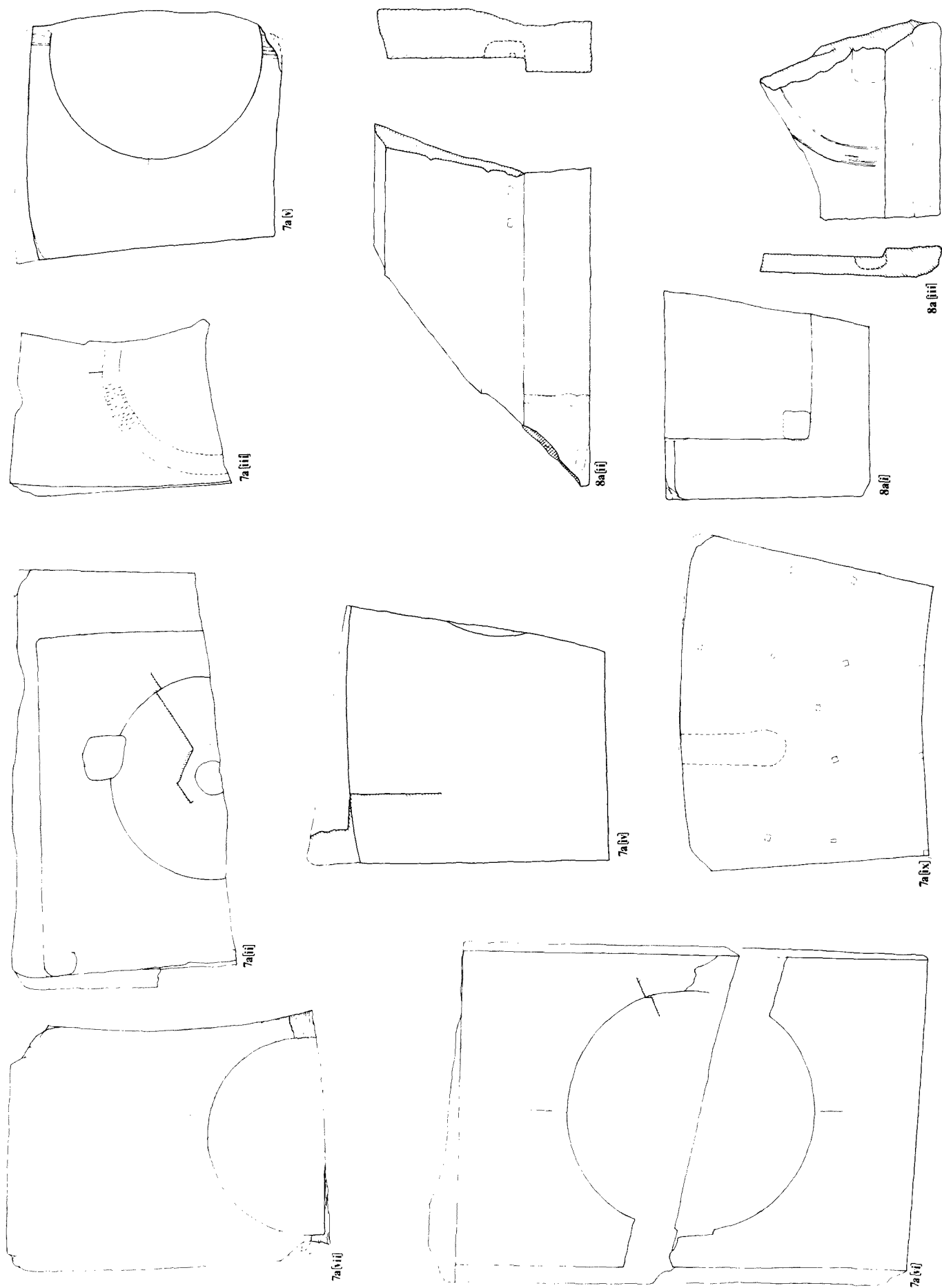


FIGURE I. Selected Marbles (scale 1:20 except 8 a i & ii 1:40)

L. 1.48 m, w. 1.46 m, th. 0.45 m; sill raised 0.09 m, pivot-hole sunk 0.115 m; level unrecorded.

ii. M3389. Large threshold, preserved for just over half its length; roughly rectangular pivot-hole ca. 0.30 m square; two small oblong sinkings for vertical door-bolts; broad sill terminating in roughly worked raised area (to support decorative outer end of jamb?) (fig. I, pl. 164).

L. 2.57 m, w. 1.56 m, th. 0.43 m. Restored overall l. 4.0 m, restored w. of doorway 3.10 m; level unrecorded.

iii. M3757. Piece of smaller threshold; sill 0.20 m broad, raised 0.03 m; roughly rectangular pivot-hole 0.115 m square, 0.045 m deep (fig. I).

L. 0.71 m, w. 0.65 m, th. 0.11 m; from level 725* (U/15-16).

iv. M2251. Fragment of threshold, with rectangular pivot-hole and raised sill.

L. 1.00 m, w. 0.50 m, th. unrecorded; from level 837* (V/15-16).

v. M2253. Two joining fragments of small threshold.

L. 0.75 m, w. 0.40 m, th. unrecorded; from level 837* (V/15-16).

vi. M8112. Intact threshold.

L. 2.16 m, w. 1.01 m (raised sill 0.30 m along front, 0.45 m to 0.56 m from front to back along sides), th. 0.37 m; between levels 1327* and 1329* (bb/14).

vii. M9120. Intact threshold (pl. 165).

L. 2.46 m, w. 1.06 m, th. 0.28 m; from level 1151* (Z/18-aa/17 area).

viii. M5801. Fragment of large threshold, with scar of door-leaf and raised sill.

L. 0.62 m, w. 0.60 m (of raised sill ca. 0.30 m); from narthex area, level unrecorded.

ix. M5802. Fragment of large threshold, with raised sill and scar of door-leaf.

L. 0.73 m, w. 0.59 m (of raised sill ca. 0.30 m); from level 700* (UV/14).

x. M6854. Fragment of threshold.

L. 1.36 m, w. 0.31 m, th. 0.31 m; from level 252 (OPQ/16).

xi. M3164. Small fragment of large threshold, with scar of door-leaf and raised sill.

L. 0.53 m, w. 0.42 m (of raised sill ca. 0.30 m), th. 0.12 m; from level 837* (V/15-16).

xii. M3513. Small fragment of large threshold, with part of pivot-hole and raised sill.

L. 0.33 m, w. 0.51 m (of raised sill ca. 0.30 m), th. 0.12 m; from level 650* (ST/17-18).

xiii. M5115. Fragment of threshold, with scar of door-leaf.

0.49 x 0.40 m; from level 1112* (aabb/15).

xiv. M9239. Fragment of threshold, with corner of raised sill.

L. 0.29 m, w. 0.56 m, th. 0.12 m; from level 1159* (Z/18-aa/17 area).

9. JAMBS AND LINTELS

The excavation yielded no intact jambs or lintels, and only one jamb-fragment that was securely identified; the excavation must, however, have yielded many examples, which have been included here in Category 11 (Various Mouldings).

a. Jambs.

i. Lower part of jamb, with broad, flat moulding along left-hand vertical edge and foot-moulding that overlaps it.

Ht. 0.91 m, w. 0.415 m, th. 0.91 m, mouldings ca. 0.13 m wide; from level 1297* (Y-bb/13-15 area).

b. Lintels with crosses.

i. M2238. Fragmentary lintel decorated with two superimposed *cyma reversa* mouldings, the upper of which has a small cross in relief, presumably set centrally (fig. E).⁷

Ht. 0.21 m, l. 1.47 m; restored l. 2.42 m, w. 0.53 m.

c. Lintels with corrugated moulding.

i. M6295. Fragmentary lintel with elaborate corrugated moulding, which is polished (fig. E).

Ht. 0.115 m, l. 1.39 m, w. of moulding 0.37 m, total w. 0.67 m; from level 590* (S/14).

ii. M1220. Fragmentary lintel with corrugated moulding (fig. K).

Ht. 0.11 m, l. 1.45 m, w. of moulding 0.19 m, total w. of block 0.43 m; from level 94 (L/14-15).

10. WINDOW-FRAMES

Fragmentary window-frames were found in very large quantity. They consist for the most part of short lengths of mullion but include a few sizeable pieces where up to half the frame is preserved (pls. 169, 170). Except in the case of two shattered frames found deep in the destruction layer of the grand cistern (X/15), joins were not made.

For convenience the frames are treated here in five categories: (a) rectangular, (b) curvilinear (semi- or quarter-circle), (c) circular, (d) polygonal, and (e) reserved (i.e., unpierced) panels.

On the inside the mullions are carefully chamfered (the profile approximately that of a flat-bottomed boat), and each panel has a rebate for the pane of glass. In many cases there was a small drill-hole at the back of the rebate, and in two cases this hole still contained a small spigot of lead, evidently for fastening the pane. Spigots were generally set either centrally at top and bottom or (as a *vi*) towards the corners.

Approximately 2,500 fragments of window-frames were recorded, from all parts of the site. The measurements of 1,231 mullion fragments, for which both thickness and width had been noted, have been used to construct a table, wherein it can be seen that the commonest thickness was ca. 0.06 m, the commonest width ca. 0.07 m, and the commonest combination of thickness and width ca. 0.06 m and 0.08 m, respectively. Measurements are to the nearest centimetre.

<i>Th.</i>		<i>W.</i>		<i>Th./W.</i>	
(in cm)	No.	(in cm)	No.	(in cm)	No.
4	27	4	36	6/8	84
5	176	5	138	8/6	56
6	261	6	234	5/8	52
7	232	7	283	6/9	51
8	206	8	274	10/7	51
9	152	9	160	9/7	51
10	116	10	71	7/9	45

From a study of these fragments it is apparent that the church was highly fenestrated and that some windows were arched (cf. *b* below). Although a rectangular grid was normal, there is some evidence for polygonal schemes (cf. *d*). Some windows, moreover, had their grids interrupted by rectangular reserved panels, which were left solid (cf. *e*). There is one example of a marble window-frame for a circular panel (c *i*). Spigot-holes and spigots show how at least some window-panes were affixed. The paucity of window glass recovered from the site might seem to imply that the windows were, at some late stage in the

church's history, systematically stripped of their panes for reuse as cullet. Some window-frames did not have spigot-holes, implying either that panes were fixed by some other method (plaster?) or that the church was in part never glazed and thus remained unfinished.

a. Rectangular.

i. Rectangular window-frame, reconstructed from fifty-six joining fragments. The frame is three panes wide and at least eight panes high; the lower part of the frame is missing. On the exterior face, the left-hand vertical bar is wider, whereas the right-hand vertical bar is narrower, than the other mullions; this frame must have been the left-hand element in a window made up of two or more frames.

Ht. 2.465 m, w. 0.95 m, th. 0.10 m; from level 1005* (X/15).

ii. Rectangular window-frame, reconstructed from seventy joining fragments. The frame is three panes wide, at least seven high, the upper part of the frame is missing. On the exterior, the right-hand vertical bar is wider than the other mullions; the frame must have been the right-hand element in a composite window.

Ht. 2.53 m, w. 0.88 m, th. 0.11 m; from level 1005* (X/15).

iii. Rectangular window-frame, damaged in upper part; three panes by at least seven high.

Ht. 2.07 m, w. 0.87 m; from level 1005* (X/15).

iv. M2614. Fragment of window-frame (fig. J).

L. 0.44 m, th. 0.07 m; from level 725* (U/15-16).

v. M3966. Fragment of window-frame (fig. J).

Ht. 0.78 m, th. 0.15 m, pane 0.27 x 0.23 m; from level 909* (W/15-16).

vi. M3964. Fragment of window-frame with two spigot-holes (fig. J).

L. 0.385 m, th. 0.11 m, pane 0.22 m; from level 908 (W/15-16).

vii. M3967. Fragment of window-frame (fig. J).

Ht. 0.90 m, th. 0.11 m, pane 0.26 m; from level 909* (W/15-16).

viii. M4498. Lower part of window-frame (fig. J).

Ht. 0.53 m, w. 0.87 m, th. (max.) 0.11 m, pane 0.20 m; from level 829 (VW/14).

ix. Fragment of window-frame with spigot-holes.

Ht. 0.20 m, w. 0.20 m, th. 0.10 m; provenance unrecorded.

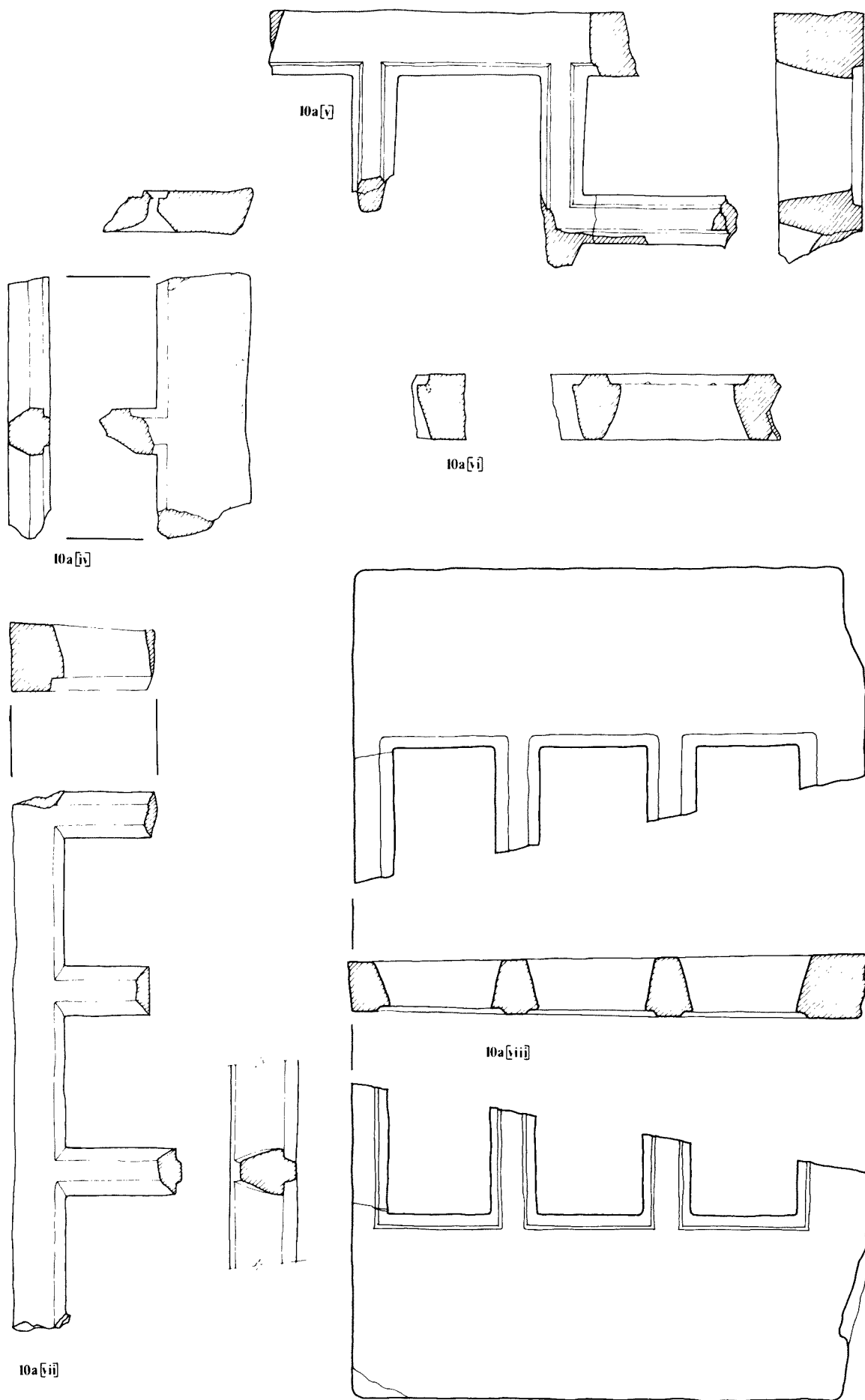


FIGURE J. Selected Marbles (scale 1:10)

b. Curvilinear.

i. M5421. Semicircular window-frame, divided into three panes by two vertical mullions.
Ht. 0.61 m, w. 1.30 m, th. 0.09 m; from level 1005* (X/15).

ii. M5426. Part of semicircular window-frame, divided into thirteen(?) panes by four(?) vertical and two horizontal mullions; rather less than half the semicircle survives, with two vertical members.
Ht. 0.84 m, w. 0.90 m; from level 1005* (X/15).

iii. Part of curved window-frame.
L. 0.26 m, th. 0.07 m; from level 81 (L/12-13).

c. Circular.

i. Rectangular corner of window-frame with rebated concave inner edge for circular(?) pane of ca. 0.30 m diam. Approximately one quarter-circle preserved.
Ht. 0.195 m, w. 0.18 m, th. 0.11 m; from level 411 (north side grading).

d. Polygonal.

i. Fragment of window-frame, with junction of two mullions converging on a third in the form of the letter K; a polygonal design.
Ht. 0.135 m, w. 0.095 m, th. 0.07 m; from level 680 (T/21).

ii. M6594. As i. From level 381* (R/9-11).

iii. As i. From level 1100 (aa/15-16).

e. Reserved panels.

i. M615. Rectangular block with scars of mullions set diagonally at the corners; the front of the block is decorated with an incised Latin cross with flaring arms, the rear face is rebated on all four sides, with spigot-holes for window-panes at top- and bottom-centre; seen from front and back, the sides of the block are slightly concave (pls. 166, 167). This was in effect a reserved panel in a window-frame, surrounded by polygonal panes.
Ht. 0.212 m, w. 0.175 m, th. 0.09 m; from level 163* (M/13-14).

ii. M1742. Block as above, but including lower border of window-frame and thereby with panes on only three sides, and with adjoining mullions forming rectangular scheme (pl. 168).
Measurements unrecorded; from level 87* (L/13-14).

iii. Fragmentary block as i.
Ht. 0.21 m; from level 153 (M/12-13).

iv. Block as i.
Ht. 0.24 m, w. 0.19 m; from level 87* (L/13-14).

11. VARIOUS MOULDINGS

In this section are grouped a number of mainly fragmentary pieces of uncertain function but distinctively moulded profile. Mouldings are listed in ascending order where possible.

a. Two fillets (the lower stepped back), *cyma reversa*, fillet; underside countersunk.

i. M121. Ht. 0.11 m; from level 122* (M/9). Three other examples: from 1135 (aa/17), 1427 (cc/17), and a second example from 122* (M9019, 10445, 123, respectively).

b. Pendant roundel beneath fillet.

i. M892. Ht. 0.09 m; from level 94 (L/14-15) (fig. K). Seven other fragments, two also from 94, three from nearby levels 50, 61, 183*; one from 446 (Turkish pit) and one from 997* (X/12-14) (M1491, 972, 142, 292, 1940, 2664, 7269, 4602, respectively). This moulding occurred both in the area of the apse and in the area of the grand cistern.

c. Two fillets (the lower stepped back), *cavetto*, fillet.

i. M162. Ht. 0.13 m; from level 122* (M/9) (fig. K).

d. Shallow *cyma recta* beneath two fillets.

i. M236. Ht. 0.13 m; from level 24 (above apse foundation) (fig. K).

e. Raised border; two narrow fillets, rounded groove beneath broad fillet.

i. M247. Ht. 0.14 m; from level 126 (M/9) (fig. K).

f. Roundel with two fillets (the upper stepped back) above, deep groove beneath, and narrower rounded moulding below; a string-course, which might equally have been classified under 17 below.

i. M7261. Ht. 0.06 m, l. 0.21 m, w. 0.10 m; from level 470 (R/16-17) (fig. K).
Sixty-one pieces were found varying in ht. from 0.06 m to 0.08 m, in l. from 0.14 m to 0.21 m, and in w.

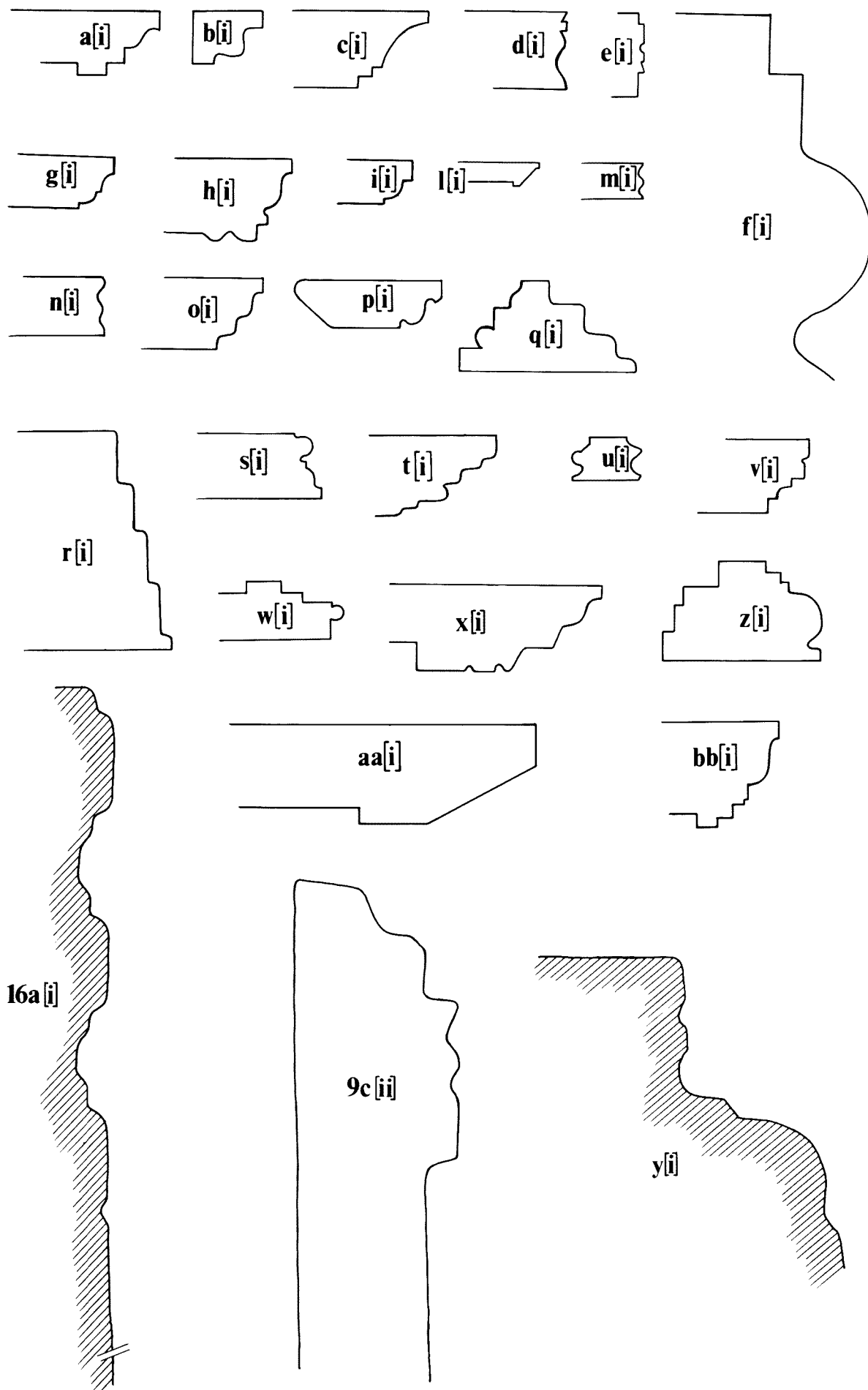


FIGURE K. Profiles of Various Mouldings, Category 11 unless otherwise stated (not to scale)

from 0.08 m to 0.19 m (the large majority 0.09-0.10 m). The largest groups were from the narthex (levels 642 [two examples], 650*, 660*, 665, 677 [two], 693 [two], 696 [two], 700*, 782, 785* [two], 830*, 1255*, 1266*) and the grand cistern (857 [two], 898, 987 [two], 997* [two], 1009*, 1010, 1094*, 1100, 1297*, 1325*, 1423) (M2355, 2880, 2533, 2080, 3716, 2401, 1904, 1801, 1802, 1781, 2315, 4713, 1848, 3090, 3091, 4555, 9842, 9359, 5940, 6319, 5873, 4239, 4972, 4711, 8203, 9393, 5918, 4293, 7851, 8345, 10441, respectively); smaller groups came from the atrium (738 [three], 739* [two], 857 [two], 909* [two], 1425*), western end of the north aisle (447*, 511, 520*, 536*, 562*, 593*, 594*, 597), and area of the apse (39, 48, 60, 73, 124, 149, 150); one piece came from the nave (470), one (379*) from outside the church's north wall (R/9-11); the find spots of three pieces were unrecorded (M3605, 3606, 3607, 3698, 3707, 3809, 3938, 4055, 4250, 10335, 7411, 6250, 6133, 7093, 7095, 6312, 6639, 6298, 3357, 2602, 1480, 3398, 301, 290, 476, 726, 6774A, 7806, 9756, 3587, respectively).

Byzantine contexts predominate for each of the groups. It is argued below that the main body of the church collapsed to north and to west, and there are indications that the apse collapsed in on itself. The surviving pieces of this moulding may have fallen from the apse and from high in the body of the church.

g. Fillet, ovolo, cavetto, fillet.

i. M3442. Ht. 0.07 m, l. 0.215 m, w. 0.138 m; from level 87* (KL/13-14) (fig. K). Eleven similar pieces were found, varying in ht. from 0.065 m to 0.09 m; one was from the same context (87*), six from adjacent contexts (50 [two], 94 [three], 165), and four from levels nearby (175 [three], 235) (M2869, 1939, 3324, 1110, 1344, 1753, 343, 448, 449, 453, 2665, respectively). This moulding is attributed to the bema, apse, or crypt.

h. Two fillets (the lower stepped back), *cyma reversa*, fillet; underside countersunk, and projecting edge decorated with rounded groove.

i. M562. Ht. 0.14 m; underpass unstratified (fig. K). None similar found.

i. Quarter-round moulding between two fillets.

i. M592. Ht. 0.07 m; from level 172 (MN/14) (fig. K). Another example (M1850) from 696 (U/13-14).

j. Roundel between two fillets.

i. M595. Ht. 0.06 m; from level 141 (MN/10-11). Another example (M2450) from 840 (V/15-16).

k. Two fillets (the lower stepped back), *cyma reversa*, fillet.

i. M735. Ht. 0.08 m; from level 307 (Q/12). Another example (M940) from 94 (L/14-15).

l. Chamfered face below fillet; underside countersunk.

i. M6688. Ht. 0.08 m, l. 0.50 m, w. 0.25 m; from level 596 (ST/14) (fig. K).

Twelve other examples were found, three of them in 94 (L/14-15), the others widely scattered (252, 354, 381*, 411, 699, 922*, 1264, 1266*, 1397) (M1041, 1560, 1561, 6858, 7075, 6718, 10697, 1851, 7624, 9051, 9423, 10318, respectively). Ht. varies from 0.08 m to 0.11 m.

m. Central convex moulding defined by concave above and below; surface polished.

i. M1283. Ht. 0.06 m, w. 0.10 m; from level 94 (L/14-15) (fig. K).

There was a second piece (M1743) from the same context, and a third (M4310) from 987 (X/12-14).

n. Two shallow concave mouldings, defining three convex. *Giallo antico*.

i. M1282. Ht. 0.10 m; from level 94 (L/14-15) (fig. K).

o. Three shallow concave mouldings in oblique projecting plane, beneath fillet.

i. M1779. Ht. 0.12 m; from level 91 (L/13-14) (fig. K). Similar piece (M2881) from 642 (S/17-19).

p. Half-round moulding in oblique plane, defined above and below by fairly deep grooves, beneath fillet. The moulded surface is polished.

i. M7768. Ht. 0.09 m, l. 0.037 m, w. 0.32 m; from level 1297* (north-west sector) (fig. K).

Four similar pieces were found, all in the area of the narthex (642, 665, 677, 1264) (M2928, 3713, 2917, 9370, respectively).

q. Block moulded on front and back. Front: fillet, ovolo, fillet, *cyma recta*; back: three stepped fillets; countersunk soffit.

i. M3758. Ht. 0.175 m, w. 0.26 m; from level 857 (VW/17) (fig. K).

Similar examples occurred in 738 (U/17-19) and 867 (VW/16-17) (M3643, 4538, respectively).

r. Moulding with three stepped fillets and cavetto; broken above.

i. M3683. Ht. 0.34 m, w. 0.24 m; from layer 665 (TU/15-16) (fig. K).

s. Broken below; half-round, fascia, *cyma reversa*, fillet.

i. M4083. Ht. 0.11 m, w. 0.15 m; from level 855* (VW/15-16) (fig. K).

t. Two stepped fillets, *cyma reversa*, fillet; soffit countersunk.

i. M4499. Ht. 0.15 m, l. 0.365 m, w. 0.46 m; from level 901 (W/14) (fig. K).

u. Fillet, chamfered moulding, roundel, cavetto, fillet.

i. M5178. Ht. 0.75 m; from level 1113 (aabb/15-16/4) (fig. K).

v. Fillet, quarter-round concave moulding, fillet, two fillets separated by narrow groove.

i. M5211. Ht. 0.125 m; from level 1091* (Z/16-17) (fig. K).

w. Corner of large block, moulded on two sides; fillet above bullnose moulding, whose lower edge recedes by two shallow steps to the underside of the block.

i. M6036. Ht. 0.125 m, l. 0.725 m, w. 0.52 m; from level 532 (STU/13) (fig. K).

x. Two joining pieces of slab with countersunk soffit and broad elaborately moulded corona.

i. M6295, 6296. Ht. 0.115 m, l. 1.42 m, w. 0.69 m; from level 590* (S/14) (fig. K).

ii. M9020. As i but preserved to its full width, with half-round moulding defined by deep grooves in lower rear edge.

Ht. 0.105 m, l. 0.82 m, w. 1.03 m; from level 1138* (Z/18).

A third example (M6285) was found in 593* (T/14).

y. Plinth of *antico verde*:⁸ flat zone topped by toruslike convex moulding, above which the thickness of the block is reduced, with two shallow concave mouldings in the vertical surface.

i. M6900. Ht. 0.25 m, l. 0.52 m, w. 0.375 m; from level 247 (OPQ/15-16) (fig. K).

ii. M6901. As i, but broken below and upper surface and front and rear edges evidently worn. L. 0.50 m; level 247.

z. Block moulded both front and rear. Front: fillet, half-round moulding, three narrow fillets stepped back; rear: three fillets stepped back and deeper step.

i. M6936. Ht. 0.17 m, w. 0.27 m; from level 390* (R/9-11) (fig. K).

A similar piece (M7202) was found in 1059 (Y/16-17).

aa. Simple chamfered moulding below fillet; underside countersunk.

i. Ht. 0.17 m, l. 1.04 m; from level 369 (R/9-11) (fig. K).

bb. *Cyma reversa* above four stepped fillets; underside countersunk.

i. Ht. 0.18 m, l. 0.35 m, w. 0.29 m; from 1290 (north-west sector) (fig. K).

12. PLINTHS

Presented here, and divided by form into seven categories, are the plinths (or sole-plates) for freestanding screens or parapets.⁹

a. Plinth with moulded sides and slot for screen, the moulding consisting of a *cyma reversa* with a fillet below and a rebate above.

i. M470. Ht. 0.12 m, w. 0.35 m, w. of slot 0.105 m; from level 9 (underpass unstratified).

ii. M10386. As i, but ht. 0.13 m, w. 0.29 m, w. of slot 0.06 m; from level 968* (WX/18-19).

iii. M8821. As i, but w. 0.46 m, w. of slot (est.) 0.075 m; from level 1380* (Y-bb/13-15 area).

Thirty-one other fragments were found, varying from 0.075 m to 0.13 m in height, and from 0.205 m to 0.45 m in width. Of all the fragments only four were

from the area of the apse (levels 50, 71, 87*, and 196), one (i above) from the underpass, while the rest were from the areas of the narthex, atrium, and north-western sector.

b. Plinth with vertical sides and slot for screen.

i. M469. Ht. 0.08 m, w. 0.21 m, w. of slot 0.06 m; from level 9 (underpass unstratified).

ii. M780. As i, but w. 0.13 m; from level 281 (P/14).

iii. M5224. As i, but ht. 0.11 m, est. w. 0.20 m; from level 1113 (aabb/15-16).

c. Plinth with chamfered sides and slot for screen.

i. M94. Ht. 0.27 m; from level 192 (M/17).

ii. M981. As i, but ht. 0.09 m; from level 94 (L/14-15).

iii. M1772. As i, but ht. 0.14 m, w. 0.27 m; from level 87* (L/13-14).

iv. M3889. As i, but ht. 0.67 m, w. 0.135 m; from level 1100 (aa/15-16).

v. M6712. As i, but ht. 0.075 m, w. 0.18 m; from level 381* (R/9-11).

d. Plinth with chamfered sides and flat top.

i. M4033. Ht. 0.08 m, w. 0.165 m; from level 908 (W/15-16).

ii. M4453. As i, but w. 0.145 m; from level 1196 (bb/17-18).

iii. M8810. As i, but ht. 0.09 m, w. 0.25 m; from level 1148 (aa/17 area).

iv. M7129. As iii, but w. 0.20 m and of alabaster; from level 1012* (X/15).

e. Curved plinth with vertical sides and slot for carved screen.

i. M10158. Ht. 0.09 m, w. 0.20 m, l. 0.80 m; level 1072 (Y/15-17 area).

f. Curved plinth with vertical inner, moulded outer, edge and flat top; moulding a plain fillet (below), roundel, and two narrower fillets stepped back.

i. M10381. Four rectangular dowel-holes in top surface, two with channels for lead. One of seven such

elements which made up the outer edge of the late circular feature in the atrium. Ht. 0.13 m, w. 0.45 m, l. 1.45 m.

ii. M10379. As i, but with two dowel-holes, both with channels, and l. 0.86 m.

iii. M10380. As i, but with three dowel-holes, two with channels, and l. 1.24 m.

iv. M10382. As i, but with two dowel-holes, both with channels, and l. 0.66 m.

v. M10383. As i, but with two dowel-holes, one with channel, and l. 0.86 m.

vi. M10384. As i, but with two dowel-holes, one with channel, and l. 0.61 m.

vii. M10385. As i, but with three dowel-holes, one with channel, and l. 0.83 m.

g. Plinth with moulded sides and flat top, the moulding consisting of a *cyma recta* above a fillet.

i. M10699. Seven rectangular dowel-slots in top surface. Ht. 0.08 m, w. 0.25 m, l. 1.065 m; from level 411 (north side of church, unstratified).

ii. M986. As i, but l. 0.30 m, and from level 215 (N/14-15).

iii. M6902. As i, but ht. 0.10 m, w. 0.28 m; from level 244* (OPQ/15-16).

iv. M6905. As iii, but ht. 0.075 m, w. 0.27 m.

13. SCREENS

a. Screen with stylized cantharus.

i. Screen of soft yellowish-white marble (Dokimian), decorated with repeating motif of stylized cantharus, straplike stem with superimposed hearts, and banana-like fronds;¹⁰ between each cantharus and its neighbour is an upright border set with alternately round and square studs, the latter with lentoid pellets attached diagonally at each corner (pl. 172). The upper border has a scheme of grape-clusters alternating with eight-petal flowers, each suspended from a simple interlinking stem. The lower border is plain. The carving is very highly finished; the technique (e.g., the fronds under-drilled at an angle of about 45°) is similar to that of the large inscribed blocks.

Measurements unavailable; one of three similar pieces reused in Turkish contexts in the Zeyrek Camii (Pantocrator).

These pieces provide the key to 102 small fragments excavated at Saraçhane of what were clearly identical screens, and they are clearly *spolia* from St. Polyeuktos and part of its sixth-century scheme (pl. 171). These fragments were found in the following levels: 24, 72, 73, 82, 94, 102, 120, 182 (two), 206 (two), 226, 228, 249, 234 (two), 237, 238, 244*, 251*, 280, 295, 309* (two), 336, 381*, 412, 434 (two), 476*, 546*, 642 (nine), 650* (six), 660* (two), 669, 677, 680, 691, 694*, 727, 729*, 736, 785* (two), 859, 865, 867, 926*, 986 (two), 1001*, 1009*, 1015*, 1072, 1147, 1181*, 1252*, 1264 (two), 1266* (four), 1272* (two), 1380* (two), 1412, 1417, 1462, 1468; the provenances of seventeen pieces were unrecorded. All pieces from securely Byzantine contexts are from the western end of the church, narthex, or grand cistern area, except for one piece (from 381*).

b. Screens with interlaced squares and monograms.

i. M2859. Fragment of screen with widely separated eight-petal flowers surrounding a square panel (pl. 173). The square panel has a border of everted triangular leaves, each with a pellet at its tip. In the square is an eight-pointed figure (two interlaced squares) with a fragmentary monogram in the enclosed octagonal space.

Ht. 0.37 m, l. 0.41 m, th. 0.114 m; from level 692 (U/13-14).

ii. M4110. Fragment of screen decorated with a border of alternating lozenge- and key-motifs, and with eight-petal flowers and strapwork in the field (fig. G, pl. 174).

Ht. 0.32 m, l. 0.28 m, th. 0.05 m; from level 909* (W/15-16).

iii. M3883. Fragment of screen(?) with studded horse-shoe-shaped band from which radiate small triangular leaves; at the centre of the horseshoe an eight-petal rosette and below it a flowerlike disc from the upper part of which issue two outturned stems (fig. G, pl. 175). The design is repeated immediately to the right.

Ht. 0.24 m, w. 0.225 m; from level 1123 (aa/17-18).

c. Screens with openwork.

i. M10529. Fragmentary plain border with stumps of perforated lattice-work along one edge.

Ht. 0.11 m, w. 0.225 m, l. 0.045 m; from level 1005* (X/15).

ii. M4793. Fragmentary plain border with stumps of perforated decoration (loops?) along one edge.

Ht. 0.18 m, w. 0.32 m; from level 867 (VW/16-17).

iii. M3686. Fragmentary plain border with stumps of openwork (include semicircular flower with four petals) along one edge.

Ht. 0.195 m, w. 0.16 m, th. 0.054 m; from level 725* (U/15-16).

iv. M3212. Fragmentary plain border with semicircular flower like that of iii along edge.

Ht. 0.328 m, w. 0.235 m, th. 0.045 m; from level 642 (S/17-19).

The width of the borders varies markedly from ca. 0.10 m (i above) to ca. 0.17 m (ii and iii) and ca. 0.30 m (iv); perhaps these are the upper, side, and lower borders, respectively.

d. Screens with rosette-ornament.

i. M7455. Fragment of screen with twelve-petal rosette surrounded by twelve(?) contiguous rings; the centre of the rosette is convex, the petals concave.

Ht. 0.135 m, w. 0.65 m, th. 0.045 m; diam. of rosette 0.06 m; from level 955* (W/18-19).

ii. M9084. Fragment of screen with part of twelve(?) petal rosette surrounded by contiguous tear-shapes (points outwards).

Ht. 0.115 m, w. 0.12 m, th. 0.045 m; from level 1009* (X/15).

iii. M4915. Fragment of screen with part of twelve(?) petal rosette surrounded by lozenge design within circular border.

Ht. 0.12 m, w. 0.11 m, th. 0.048 m; from level 1085 (Z/16-17).

Two similar fragments were found in level 660* (T/15-16), one in 782 (V/12-13) (M2035, 2036, 2043, respectively).

e. Screens with six-arm crosses.

i. M1200. Screen in two joining fragments, decorated with a six-arm cross (formed by six heart-shaped incisions) encircled by two ribbons (or tendrils); the ends of the inner ribbon are twisted into a short pendant plait, the ends of the outer ribbon dipping to enclose this and crossing each other to terminate in ivyleaf-tips

in the panel's lower corners (pl. 177). Identical design on both sides.
Ht. 0.98 m, l. 0.97 m, th. 0.10 m; from level 94 (L/14-15).

ii. M6698. Four joining fragments of upper central part of screen similar to i.
Ht. 0.52 m, w. 0.60 m; from level 373 (R/9-11).

iii. M7080. Fragment of screen similar to i.
Ht. 0.36 m, w. 0.42 m; from level 464 (R/15-16).

iv. M7055. Fragment of screen similar to i.
Ht. 0.255 m, w. 0.325 m; from level 382 (R/9-11).

f. Screens with wreathed cross between cross-and-orbs.

i. Fragmentary screen (seven joining pieces, top corners missing) decorated at centre with six-arm cross (formed by six heart-shaped incisions) within a wreath flanked on each side by cross-and-orb (fig. H).
Ht. 1.01 m, w. 1.55 m, th. 0.09 m; from levels 745*, 867.

ii. Fragmentary screen (eight joining pieces), as above (fig. H).
Ht. 1.05 m, w. 1.85 m, th. 0.12 m; from level 828 (VW/14).

iii. M611. Two joining fragments with cross (on right) flanking wreath, as i (pl. 178).
Ht. 0.39 m, w. 0.39 m, th. 0.056 m; from level 206 (N/13).

iv. M4514. Fragment of wreath with six-arm cross, as i.
Ht. 0.37 m, w. 0.56 m; from level 745* (UV/17).

v. M10399. Fragment of wreath with six-arm cross and border; on reverse simple four-arm cross in plain circle.
Ht. 0.60 m, w. 0.55 m, th. 0.05 m; from bb/18-19, unstratified.

vi. M9435. Fragment as iv.
Ht. 0.36 m, w. 0.46 m, th. 0.06 m; from level 1269* (narthex).

Thirty-seven similar fragments were found, in levels 57, 83, 140, 251*, 282*, 304*, 379*, 382, 411, 430, 491, 642, 662*, 678 (two pieces), 679, 693, 700*, 782 (two), 785*, 837*, 867, 906, 956, 994*, 1016* (two), 1059, 1264, 1269*, 1325*, 1380* (two), and one each from U/16, W/17, and bb/18-19 unstratified (M687, 776, 1705, 1810, 2419, 2482, 2546, 2884, 3101, 3103, 5510,

6073, 6074, 6075, 6756, 6848, 6933, 7008, 7009, 7058, 7204, 7268, 8344, 8638, 8813, 9343).

g. Screens with eight-arm cross inscribed within circle.

i. M2882. Fragment of screen decorated with two bars of eight-arm cross within circle which is tangential to straight border-mouldings.
Ht. 0.335 m, w. 0.27 m, th. 0.055 m; from level 642 (S/17-19).

ii. M2907. As i, but decorated on both sides; rear decoration apparently lacks circle.
Ht. 0.32 m, w. 0.38 m, th. 0.065 m; from level 785* (V/12-13).

iii. M10138. As ii above.
Ht. 0.33 m, w. 0.26 m, th. 0.11 m; from Y/15-17, unstratified.

h. Staircase panels.

i. M7072. Fragmentary screen, decorated with cross-and-orb in recessed panel; oblique border upper right and back only roughly dressed, thus panel to left of ascending stair (pl. 179).
Ht. 0.545 m, w. 0.42 m; from level 1005* (X/15).

ii. M7698. Complete screen in two joining fragments, as i above, but engaged post on left side and oblique border upper left, thus panel to right of ascending stair (pls. 181, 182).
Ht. (left side) 0.70 m, (right side) 1.20 m, w. 0.73 m; larger piece from level 1298 (Y-bb/13-15 area), smaller from 1336* (Z/13-14).

iii. M9063. Fragmentary screen, central panel with cross-and-orb; oblique edge upper right (fig. H, pl. 180).
Ht. 0.68 m, w. 0.61 m, th. 0.11 m; north-west sector, level unrecorded.

iv. M10377, 10378. Two joining fragments of screen, cut to accommodate step; rough flange (w. 0.05 m) along one edge; obtuse-angle border (fig. H).
Ht. 0.51 m, w. 0.61 m, th. 0.10 m; from level 968* (circular marble structure in WX/18-19).

v. M10366, 10368, 10370, 10371, 10373, 10375, 10765. Seven joining fragments of screen, with acute-angle corner; rough flange (w. 0.05 m) along shorter of the two preserved edges; six-arm cross at centre(?) of panel (fig. H).

L. (of longer preserved edge) 1.80 m, l. (of shorter) 0.71 m, th. 0.11 m; from level 968 (circular marble structure).

i. Screens of coloured marble.

Many fragments were found in all parts of the site of screen-borders, which resisted attribution and classification. Approximately half had mouldings on both sides, and, as in some cases the border was much wider on one side than on the other, a small piece with moulding on one side only might be misleading. Of 439 fragments recorded, 416 were of Proconnesian marble and 23 of coloured marbles. The latter are listed here by material.

i. M2642. Red porphyry. Fragment of screen with corner-moulding; border of three flattish roundels. Ht. 0.208 m, w. 0.184 m, th. 0.022 m; from level 61 (area KM).

Four other pieces, two from 61, and one each from 237 and 1090 (M2641, 2670, 5535, 827, respectively).

ii. Green breccia. Fragment of straight border and edge of screen-panel. Ht. 0.09 m, w. 0.19 m; from level 837* (V/15-16).

iii. M4748, 4749. Black-and-white marble (Adapazari?). Five joining fragments of screen with corner moulding; flat border bevelled on inner edge and step back to screen-panel (pl. 176). Ht. 0.21 m, w. 0.21 m, total w. of border 0.10 m, th. 0.022 m; from level 745* (UV/17).

iv. Dokimian marble. Eleven small fragments, which may be from the screen type 13 a, found in the following levels: 217, 677, 692, 782, 788*, 837* (two pieces), 1000*, 1009*, 1090, 1263.

v. M7583. Alabaster. Fragment of screen with corner-moulding chamfered on inner edge; within panel a bar in relief (triangular section), parallel to border. Ht. 0.12 m, w. 0.11 m, th. 0.045 m; from level 427 (R/12-13).

A joining fragment (M6789) from area STU/13. Another small piece (M7026) from 956.

j. Unassignable screens.

117 fragments, again from all areas of the site, were found of the central areas of screen-panels decorated, generally on both sides, with crosses of various types, but unassignable to particular categories.

k. Fragments with various other incomplete designs.

i. Fragment with, on one side, five concentric circles (largest ca. 0.20 m diam.), on the other a two-lobed leaf. Ht. 0.15 m, w. 0.13 m, th. 0.05 m; from level 87* (L/13-14).

ii. Fragment with circular decoration (ca. 0.30 m diam.) of two concentric rows of concave petals, encircled by a knotted cord. Ht. 0.18 m, w. 0.115 m, th. 0.05 m; from level 782 (V/12-13).

iii. Fragment with on one side two raised fillets meeting at an angle of ca. 60° (strapwork?), on the other a curvilinear scheme badly damaged. Ht. 0.18 m, w. 0.11 m, th. 0.055 m; from level 999* (X/12-14).

iv. Fragment with two interlocked loops. Ht. 0.16 m, w. 0.30 m, th. 0.05 m; from level 994* (X/12-14).

v. Three joining fragments: on one side, two stems rising obliquely to converge in a palmette, below which is a pendant leaf, the whole contained within a lozenge-shaped frame; on the other side, a cross also within a lozenge-shaped frame. Ht. 0.22 m, w. 0.22 m, th. unrecorded; from level 381* (R/9-11).

vi. Three joining fragments of a corner of a screen, on each side a border in three fascias and part of a simple plant. Part of v above? Ht. 0.25 m, w. 0.26 m, th. unrecorded; from level 381* (R/9-11).

vii. Fragment of left-hand end of screen, decorated on front with broad border in 5 fascias and a relatively narrow central panel with an erect trilobate leaf (one of a row?), rear surface plain. Ht. 0.51 m, w. 0.23 m, th. 0.04 m; from level 1377* (aa/15).

viii. Fragment of central part of screen depicting a bird on left, facing a disc, which is bisected by one narrow vertical bar and supported by another. Ht. 0.325 m, w. 0.56 m, th. 0.05 m; from level 411 (north side grading).

There were a further twenty-two indescribable fragments in this category.

I. Table-tops.

Six pieces were found that are attributable to particularly finely cut table-tops or trays, distinguished by straight raised borders and thin floors. Three are of Dokimian marble.

i. M6988. Raised rectangular border decorated with two parallel grooves in top surface.

Ht. 0.095 m, w. of border 0.125 m, total w. 0.26 m, th. of floor ca. 0.04 m; from level 261* (OP/17).

ii. M9059. Raised border, inner face concave (with smooth transition to floor), outer face roughly straight, with deep groove towards top.

No measurements recorded; from level 1304 (Y/15).

iii. M10070. Fragment of approximately rectangular raised border, with one shallow groove in upper surface.

Ht. 0.06 m, w. of border 0.07 m, total w. 0.11 m, th. of floor ca. 0.015 m, l. 0.16 m; from Y/15-16, unstratified.

iv. M1735. Raised border (externally rectangular, internally chamfered) of Dokimian marble.

Ht. 0.026 m, w. 0.27 m; from crypt area, unstratified.

v. M9166. Raised border (outer and inner faces concave), with groove on top near inner edge, of Dokimian marble.

Ht. 0.04 m, w. of border 0.05 m, total w. 0.10 m, l. 0.09 m; from level 1009* (X/15).

vi. M10229. Raised border (inner edge concave with smooth transition to floor, outer a *cyma reversa*) of Dokimian marble.

Ht. 0.04 m, w. of border 0.04 m, total w. 0.065 m, l. 0.13 m; from Y/15-17, unstratified.

14. POSTS AND COLONNETTES

410 pieces were found of posts and colonnettes and their capitals and bases. They are presented here in five categories:

a. Curvilinear	239 fragments
b. Polygonal	76 fragments
c. Rectangular	69 fragments
d. Detached Capitals	14 fragments
e. Detached Bases.	12 fragments

The diameters of colonnettes tended to be between ca. 0.09 m and ca. 0.14 m, although some were as large as 0.23 m, others as small as 0.04 m.

a. Curvilinear.

i. M6835. Engaged colonnette capital cut in one piece with shaft (fig. G, pl. 183). The motif on the front of the capital is an erect oblong frame containing superimposed chevrons; from the outer edge of the frame springs at the middle of each side a tongue-shaped leaf and at each corner a narrower leaf with a pellet at its tip. Above and below the leaf in the middle of the long side springs a leaf whose tips curl in to enclose a pellet. On the sides the design is repeated.

Ht. 0.45 m, diam. 0.28 m; from level 255 (OPQ/16).

ii. M6896. Fragment of lower end of moulded, pierced colonnette of pink alabaster. The outer surface is decorated with three fillets (one narrow [0.03 m] over two broad [each 0.06 m]), and the shaft is pierced centrally by a hole ca. 0.06 m in diameter.

Ht. 0.185 m, lower diam. 0.16 m; from level 990 (X/12-14).

Twenty-two other fragments of pierced alabaster colonnettes were recovered; eight were from level 237 (O/14-15), the others from 60, 94 (two examples), 102, 181, 217 (two examples), 229, 245*, 246, 254*, 671, 990, 1000*.

iii. M2643. Upper part of colonnette, with capital separated from shaft by two roundels and decorated with (formed of) a five-lobed acanthus leaf at each corner.

Ht. 0.116 m, diam. of shaft 0.06 m; from level 61 (area KM).

iv. M3264. Fragment of shaft of colonnette with collar of two roundels.

Ht. 0.175 m, diam. of shaft 0.085 m; from level 71 (L/11-12).

v. M2861. Fragment of shaft of colonnette with collar of three roundels.

Ht. 0.42 m, diam. of shaft 0.17 m; from level 642 (S/17-19).

vi. M6707. Upper part of colonnette, with capital separated from shaft by roundel and decorated with a seven-lobed acanthus leaf at each corner supporting abacus with concave sides (fig. G).

Ht. of capital 0.28 m, diam. of shaft 0.19 m; from level 381* (R/9-11).

vii. M7105. Upper part of colonnette, with capital separated from shaft by two roundels and decorated with a seven(?)-lobed acanthus leaf at each corner; upper part damaged.

Ht. 0.37 m, diam. of shaft 0.22 m; from level 1005* (X/15).

viii. M7190. Upper part of colonnette, with capital decorated with five-lobed acanthus leaf at each corner; broad plain upper border, and small knob on top centre.

Ht. 0.13 m, diam. of shaft 0.06 m; from level 392 (R/9-11).

ix. M7265. Upper part of colonnette with capital decorated on each side with erect trilobed acanthus leaf; small knob on top centre.

Ht. 0.18 m, diam. of shaft 0.08 m; from level 379* (R/9-11).

x. M9457. As ix, but sides of capital plain; broken at junction with shaft.

Ht. 0.18 m, top 0.07 m square; from level 1148 (Z/18-aa/17-18 area).

xi. M534. Spirally fluted colonnette of grey marble.

Ht. 0.20 m, fillet at base 0.04 m high, base diam. 0.10 m; underpass.

xii. M7109. Spirally fluted colonnette of creamy white marble with purple veins; above a horizontal fillet the flutes rise to the left, below it they fall to the left.

Ht. 0.37 m, diam. 0.095 m; from level 1005* (X/15).

Another fragment (M8612) from 1009* (X/15).

b. Polygonal.

i. M1762. Post pentagonal in plan, the inner face concave and the two adjacent faces slotted for screens.

Ht. 0.39 m, w. 0.13 m, th. 0.135 m; from level 217 (N/16).

ii. M9050. Post pentagonal in plan, the inner face straight and the two adjacent faces slotted.

Ht. 0.24 m, w. 0.15 m, th. 0.145 m; from level 1264 (narthex).

iii. M1803. Fragment of hexagonal colonnette.

Ht. 0.18 m, diam. 0.06 m; from level 692 (U/13-14).

Similar fragment (M506) from level 213* (N/14).

iv. M7392. Fragment of colonnette with sixteen convex flutes (or ribs), alternately wide and narrow.

Ht. 0.12 m, diam. 0.07 m; from level 309* (QR/12).

Similar fragments (M7666) from level 367 (R/9-11).

v. M7110. Upper part of octagonal colonnette carved in one piece with squarish capital. The capital, which

is separated from the shaft by a roundel, is decorated on each face by a simple palmette rising from a double stem, each strand of which links up with the palmette on the adjacent face.

Ht. 0.20 m, diam. of shaft 0.085 m; from level 397* (R/9-11).

vi. M8485. Upper part of octagonal colonnette; with narrow fillet 0.16 m from one end.

Ht. 0.655 m, diam. 0.10 m; from level 1336* (Z/13-14).

vii. M7047. Upper part of octagonal colonnette carved in one piece with simple capital, which is decorated by two contiguous Y-shaped elements in shallow relief on each side and separated from the shaft by a roundel.

Ht. 0.34 m, diam. of shaft 0.075 m; from level 304* (QR/11).

viii. M7061. Upper part of octagonal colonnette carved in one piece with capital and impost; the capital is in effect a basket-capital, decorated with (or formed by) a five-lobed acanthus leaf at each corner, separated from the shaft by three progressively reduced narrow fascias and with a rectangular impost whose top surface is, however, mitred at 45°.

Ht. 0.225 m, diam. of shaft 0.68 m; from level 388* (R/9-11).

ix. M6274. Lower (?) part of octagonal colonnette with two narrow octagonal fillets separating shaft from rectangular "base."

Ht. 0.125 m, diam. of shaft 0.07 m, w. of "base" 0.07 m; from level 898 (W/12-13).

There were in addition fifty-one other fragments of octagonal colonnette shafts, with diameters from 0.05 m to 0.09 m.

c. Rectangular.

i. M7098. Post of square section surmounted by roundel supporting colonnette (broken), carved in one piece (fig. H). On two adjacent sides the post is plain, on the front it is decorated with an oblong countersunk panel with concave ends, and on the fourth there is a vertical slot for a screen. Below the decorative panel on the front is the mason's mark YK̄.

Ht. 1.22 m, w. (front), 0.22 m (side with slot), 0.21 m, ht. and w. of slot 0.93 m and 0.05 m; from level 1005* (X/15).

ii. M7203. As i, but with decorated panel (with rectan-

gular ends) on two opposed faces, and vertical slots on the other two (fig. H).

Ht. 1.17 m, w. 0.20 × 0.20 m, ht. and w. of slots 0.86 m and 0.05 m; from level 1059 (Y/16-17).

iii. M8489. Intact post with ovoid finial; the back is plain, the front decorated with an oblong countersunk panel with concave ends; the right-hand side has an oblong panel with rectangular ends, and the left has a broad, shallow slot running the full height of the post (fig. H, pl. 184).

Ht. (including finial) 0.83 m, section 0.11 m square, ht. and w. of slot 0.72 m and 0.08 m; from level 1336★ (Z/13-14).

iv. M8488. Upper part of square post with scar of superimposed octagonal colonnette; back plain, front and sides decorated with oblong countersunk panels (pl. 185).

Ht. 0.60 m, section 0.115 m; from level 1336★.

v. M5990. Lower part of square post; two adjacent faces decorated with oblong countersunk panel with rectangular ends, a third face has a vertical slot for the screen, the fourth is damaged.

Ht. 0.65 m, w. 0.24 m, w. of slot 0.04 m; from layer 1000★ (X/12-14).

vi. M1745. Fragment of upper part of square post of alabaster, one side plain, one adjacent with rectangular countersunk panel, the other two missing; raised disk carved on top surface.

Ht. 0.36 m, w. 0.19 m; from level 217 (N/15).

Six other fragments of rectangular posts of alabaster were recorded, four from level 94 (L/14-15), one unstratified from the area LM/11-12, and one without provenance.

vii. Upper part of rectangular post without decoration or slot, and with small knob on top centre.

Ht. 0.14 m, 0.07 × 0.075 m section; from level 381★ (R/9-11).

One similar piece was found in this level, and another in 1294.

d. Detached capitals.

i. M3306. Lower part of small capital of corinthian type; roundel decorated with acanthus leaves trailing diagonally, beneath traces of larger erect acanthus.

Ht. 0.096 m, lower diam. 0.195 m, max. diam. 0.25 m; from level 66 (L/9-10).

ii. M6921. Small capital of ionic type.

Ht. 0.11 m, overall l. 0.36 m; from level 452 (R/14-15).

iii. M8361, 9531. Small capital of doric type for square post.

Ht. 0.09 m, abacus 0.18 m square, post ca. 0.10 m square; from level 1336★ (Z/13-14).

iv. M8486. Small capital of devolved doric type, dressed below for octagonal colonnette; moulded "abacus," and, on one side, simple split palmette carved on "echinus."

Ht. 0.14 m, abacus 0.23 m square, shaft ca. 0.10 m diam.; from level 1336★.

v. M5974. Small capital with incised design on one side only of two half-leaves of seven-lobed acanthus; other sides plain.

Ht. 0.08 m, abacus 0.10 m square, lower diam. 0.07 m; from level 901 (WX/14-16).

e. Detached bases.

i. M6748. Base of colonnette, consisting of two roundels and circular seating (with dowel-hole) above square plinth.

Ht. 0.15 m, plinth 0.30 m square, diam. of seating 0.285 m; from level 387★ (R/9-11).

15. DECORATED WALL-PANELS

a. Cross-in-arcade friezes.

i. Frieze decorated in shallow, flat relief with cross-in-arcade motif, each bay strictly separated from its neighbour; a roundel above the space between each pair of arches, a Latin cross with flaring arms within each arch; a bead-and-reel border above and below (pl. 188). The back is roughly dressed.

Ht. 0.305 m, th. 0.06 m.

Forty-two pieces of this frieze were recovered, giving a total minimum length of over 5.0 m. Of these, only five (M2690, 2691, 26, 2045, 3935) were found in areas other than that of the apse and crypt, and these were all from more or less disturbed levels (280 [two pieces], 773, 782, 908). Of the others, sixteen (M888, 889, 941, 980, 1019, 1120, 1189, 1225, 1248, 1371, 1372, 1373, 1391, 1451, 1453, 1454) were from level 94 (L/14-15), five (M165, 200, 208, 264, 267) from 165

(M/14), the rest (M330, 2866, 2914, 2915, 3454, 1611, 1983, 1654, 446, 447, 435, 497, 576, 98, 57, 126) from adjacent or nearby levels (24, 50, 51 [two pieces], 82, 86 [two pieces], 100, 145, 158 [two pieces], 159, 172, 181, 182, 186*). There can be no doubt that this frieze should be assigned to the decoration of the sanctuary.

b. Yoke friezes.

i. M1452. Frieze decorated in shallow, flat relief with a repeated yoke motif; a bead-and-reel border above and below (pl. 189). This is clearly a pendant to 15 a i and should likewise be assigned to the sanctuary.

Ht. 0.26 m, th. 0.06 m.

Thirty one pieces of this frieze were found, giving a total minimum length of over 4.0 m, and distribution resembled closely that of 14 a. Six were from level 94 (L/14-15), four from 87* (KL/13-14), and sixteen were from adjacent or nearby levels (38, 50, 66, 83, 158 [two pieces], 165 [two pieces], 168*, 169*, 175 [two pieces], 217, 229, 236 [two pieces]); the others were from 280 (two), 281, 418, and 515 (M1185, 1198, 1452, 1615, 1616, 1617, 2336, 2870, 2984, 1770, 3282, 1930, 3381, 3470, 426, 439, 138, 146, 347, 650, 389, 390, 872, 1082, 777, 786, 731, 2689, 769, 10629, 6241, respectively).

c. Vegetable friezes.

i. M8487. Frieze decorated with a repeated vegetable motif, identical to that of impost 2 g i above (pl. 190). Ht. 0.24 m, l. 0.41 m, th. 0.05 m; from level 1336* (Z/13-14).

Fourteen pieces of this frieze were found, giving a minimum length of 2.50 m. Apart from one (M6301) from the north-western sector of the nave (level 597) and two (M8519, 10239) from the narthex (1238, 1266), they came from levels in or over the grand cistern (997, 1006, 1238, 1266, 1290, 1297, 1336 [two pieces], and three unstratified) (M5570, 7400, 8519, 10239, 10037, 7766, 8362, 8487, 9372, 9388, 10005).

d. Curving wall panels.

i. Wall panel, slightly concave in plan, in three zones, the upper and lower of which are decorated in relief, the central being left plain (fig. G, pls. 186, 187). The two decorated zones are closely similar, each having a row of three stylized plants. From a simple three-lobed leaf resting on three pellets rises a central stem crowned by a small egg-shaped flower above three more pellets. This is flanked by two graceful feathery leaves, which

spring not from the base of the main stem, but from the lateral lobes of the base leaf. These feathery leaves curve out each to touch its neighbour's tip, the two tips together supporting a small supine crescent against the upper edge of the zone. The central lobe of the base leaf is backed by a slightly larger version of itself. The veins of the leaves are shown simply, in fine relief. The background is cut deeply, and its relatively large area is smooth. The back of the panel is only roughly dressed, indicating that it was set against a wall. The panel's curvature suggests a bay of about 7.0 m in diameter.

Ht. 1.62 m, w. 0.88 m, th. 0.065 m; reconstructed from fragments from level 94 (L/14-15).

Twenty-seven fragments were found, of which twenty-two, including all the larger pieces, were from level 94; the others were from 50, 86 (two pieces), 103, and 213, all within the area of the crypt (M970, 971, 1021, 1024-1032, 1108, 1121, 1122, 1618-1621, 2712, 2714, 2715, 1937, 974, 978, 1724, 519 respectively.) They come from at least three panels. It is most probable that these curved panels fell from the inner face of the apse, where they may have served as window-dividers.

16. SKIRTING

a. Panel with three raised mouldings, defined by two broad flat sinkings each with a central channel and by a groove (below) and a rebate (above); the bottom quarter of the panel is plain (fig. K, pl. 191).

i. M965. Ht. 0.48 m, l. 0.79 m, th. 0.09 m; from level 94 (L/14-15).

Seventy-two other fragments were found, the provenance of fifteen of which is unknown; the rest are from the following levels: 50, 71, 87*, 94 (two pieces), 379*(two), 420, 700*, 725*, 738, 782 (two), 833*, 856, 870*, 885, 912*, 923, 924, 960, 997* (three), 1000*(three), 1005*, 1016*, 1038, 1081*, 1094*, 1108, 1112*(four), 1122, 1144*, 1151*, 1251*, 1272*(two), 1290(three), 1293, 1297*(two), 1298, 1304 (two), 1310*, 1323*, 1336*(two), 1380* (M1199, 1769, 2368, 2723, 2933, 3024, 3030, 3219, 3373, 3769, 3750, 3579, 3826, 4034, 4284, 4413, 4574, 4584, 4587, 4835, 4858, 4881, 5021, 5160, 5163, 5165, 5190, 5735, 5798, 5993, 5994, 5997, 6149, 6331, 6332, 6775, 6776, 7011, 7064, 7076, 7182, 7228, 7457, 7610, 7700, 7721, 7723, 7813, 7815, 7816, 7890, 7922, 8126, 8139, 8323, 8325, 8327, 8490, 8532, 8547, 8608, 8634, 8638, 9054, 9055, 9057,

9058, 9148, 9215, 9237, 9357, 9392, 9706, 9759, 9820, 10134, 10136, 10149, 10220, 10440, 10499, 10605, 10621, and 10689, respectively).

b. Panels decorated with raised upper border consisting of a broad flat fillet beneath four narrow mouldings, the lowest of square section, the middle pair triangular, the uppermost a roundel cut back particularly above; towards the bottom edge of the panel a narrow groove.

i. M7205. Ht. 0.90 m, th. 0.13 m; from level 1059 (Y/16-17).

In addition, two small fragments (M3429, 7302) were found, in levels 275 (P/12) and 948 (W18-19), respectively.

c. Upper part of panel decorated at upper edge with concave moulding above roundel.

i. M6882. Ht. 0.50 m, l. 0.44 m, th. 0.08 m; from level 956 (w/18-19).

ii. M6883. Similar. Ht. 0.28 m, l. 0.50 m, th. 0.09 m; from level 956.

In addition, seventeen other fragments were found, of which four (M1771, 7327, 3728, 3392, from levels 50, 367, 665, 785*) present a concave curve in plan; the rest (M1035, 1042, 873, 6851, 6367, 6368, 6715, 6721, 7056, 6011, 1858, 3115, 6076) are from levels 94 (two), 276, 308, 380 (two), 381 (two), 382, 532, 785 (two), unstratified, respectively.

d. Panel decorated at upper edge with concave moulding above narrow groove.

i. M6292. Ht. 0.70 m, th. 0.09 m; from T/13-14, unstratified.

ii. M4571. Similar fragmentary panel. Ht. 0.44 m, l. 0.44 m, th. 0.10 m; from level 997* (X/12-14).

iii. M4582. Similar. Ht. 0.42 m, l. 0.375 m, th. 0.10 m; from VW/17, unstratified.

iv. M10698. Similar. Ht. 0.455 m, l. 0.325 m, th. 0.08 m; from level 411 (outside church's north wall).

In addition, nineteen other fragments were found, of which seven came from R/9-11 (levels 175 [two items], 372, 379*, 381* [three items], 424), outside the church's north wall (M6664, 6912, 6375, 6376, 6695, 6713, 6716, 7070, respectively).

e. Panel decorated at upper edge with two raised

mouldings above one sunken one, all of rectangular section.

i. M899. Measurements unrecorded; from level 237 (O/14-15).

f. Fragmentary panel decorated with three raised mouldings, which are defined by three broad, flat sinkings, each with a central channel, and by a rebate above.

i. M1756. Ht. 0.56 m, l. 0.56 m, th. 0.09 m; from level 50(K/13-14).

g. Panel decorated with four narrow grooves.

i. M2908. Ht. 0.56 m, l. 0.36 m, th. 0.09 m; from level 660* (T/15-16).

h. Fragment of panel decorated with flattish raised moulding and above (or below) two adjacent rounded sinkings.

i. M3187. Ht. 0.20 m, th. 0.09 m; from level 782 (V/12-13). A small piece (M3862) from level 727 (U/15-16) is perhaps similar.

i. Fragmentary panel decorated with flattened roundel defined by two narrow grooves, above semicircular sinking.

i. M3280. Preserved ht. 0.29 m, l. 0.39 m, th. 0.65 m; from level 66 (L/9-10).

j. Small fragment of panel decorated with two semicircular sinkings defined by three pairs of narrow roundels.

i. M4190. From level 1123 (aa/17-18).

k. Small fragment of panel decorated with three narrow rectangular grooves.

i. M4725. From level 999* (X12-14).

l. Fragmentary panel decorated with two fillets defined below by a narrow groove, between by a broad, flat sinking with central channel, and above by another broad sinking bounded by a grooved fillet.

i. M8546. Preserved ht. 0.38 m l. 0.44 m, th. 0.12 m; from level 1380*.

m. Fragmentary panel with rebate on upper edge; broad raised upper border divided horizontally by two pairs of narrow grooves.

i. M8551. Preserved ht. 0.33 m, l. 0.28 m, th. 0.09 m; from level 1380*.

n. Corner of panel decorated with (from outer edge) broad flat moulding with two narrow grooves, and two broad flat sinkings each with a semicircular groove.

i. M8823. Ht. 0.31 m, l. 0.49 m, th. 0.10 m; from level 1380*. Similar pieces were also found in layers 662 (T/15) and 988 (X15) (M8652, 9238, respectively).

o. Upper part of fragmentary panel, with double (stepped) rebate at top edge and shallow curvilinear moulding.

i. M9640. Ht. 0.19 m, l. 0.25 m, th. 0.65 m; from level 1136 (aa/17).

p. Fragment of panel decorated with grooves of semi-circular section, ca. 0.025 m wide and apart.

i. M10294. Ht. 0.18 m, l. 0.14 m, th. 0.035 m; from level 463 (R/15-16).

17. BEADING

Fragments of beading, which presumably separated wall-panels of marble revetment, were prolific and belong to eight clear categories. These are listed below, with number and percentage of the total for each category, and there follow descriptions of typical examples in each category.

a. Roundel	1,263 fragments	39.2%
b. Bead-and-reel	1,007	31.2
c. Chamfered	534	16.6
d. Dentil	319	9.9
e. Double-dentil	29	0.9
f. Double-dentil and roundel	10	0.3
g. Saw-tooth	52	1.6
h. Square edge	10	0.3
Total	3,224	100.0%

The average length of all these pieces is probably about 0.10 m, which means that the site yielded more than 300 running metres of beading. The beading would have been used at various levels in the church,

and of course it ran vertically as well as horizontally. A length of over 300 metres, however, must represent considerably more than 5 percent of the total, which is approximately all that remains of the main inscribed entablature. In quarrying operations on the site, it was the larger blocks which were sought, not small pieces like these.

a. Beading with simple roundel moulding.

i. M170. Th. 0.027 m, l. 0.11 m, w. 0.07 m; from level 183* (M/15).

ii. M171. Th. 0.024 m; from level 183*.

b. Beading decorated with bead-and-reel, which might better be described as long beads alternating with short (occasionally pairs of short) (pls. 192, 195).

i. M59. Th. 0.02 m, l. 0.20 m, w. 0.072 m; from level 182 (M/15).

ii. M181. Th. 0.035 m, l. 0.13 m, w. 0.057 m; from level 119 (M/9).

c. Beading chamfered on lower front edge.

i. Th. 0.025 m, w. 0.07 m; from level 158 (M/13).

ii. Th. 0.028 m, w. 0.12 m; from level 158.

d. Beading with short sections of lower front edge chamfered to produce approximately square dentils (pl. 193).

i. M186. Th. 0.03 m, l. 0.166 m, w. 0.065 m; from level 119 (M/9).

e. Beading with short sections of lower front edge, and, alternately, short sections of upper front edge, chamfered to produce alternating scheme of upper and lower dentils (pl. 193).

i. M2993. Th. 0.07 m, l. 0.24 m, w. 0.11 m; from level 56* (K/14-15).

ii. M3139. Th. 0.33 m; from level 837* (V/15-16).

f. Beading of T-shaped section, the long "arm" being a flange that is bonded into the wall, the "cross-bar" being decorated with a dentil moulding along each outer end and with a raised roundel along its centre line (pl. 193).

i. M1953. Th. 0.075 m, l. 0.205 m, w. 0.135 m; from level 50 (K/13-14).

Of the nine other pieces found, five were from level 94 (L/14-15/3), two from nearby (levels 60, 237), and two from further afield (379*, 1094*) (M1044, 1290, 1380, 1381, 1450, 1531, 1594, 5008, 6820). Five, including that described above, were corner-pieces.

g. Beading with saw-tooth moulding in plan (pl. 194).

i. M253. Th. 0.022 m, l. 0.085 m, w. 0.05 m; from level 24 (H/14).

ii. Th. 0.025 m, l. 0.09 m; from level 165 (M/14).

h. Beading with undecorated rectangular profile.

i. M1268. Th. 0.28 m; from level 94 (L/14-15).

ii. M3335. Th. 0.21 m; from level 106 (L/16-17).

18. ARCHES

a. Arch with undulating stem.

i. M8114. Fragment of an arch decorated with dentils beneath an undulating stem which has a back-curling leaf in each curve; the stem evidently grows from left to right.¹¹ (pl. 196) The leaves are three-lobed, and the first lobe, which curls back to touch the stem, is separated from the stem only by a drill-hole. The arch has a rebate on its back lower edge. All the fragments listed below may be from the same block. The pieces were all found in twelfth-century contexts, in or around the grand cistern.

Ht. 0.151 m, l. 0.545 m, th. 0.085 m, estimated original diam. 2.5-3.0 m; from level 1336* (Z/13-14).

ii. M4883. Fragment: ht. 0.145 m, l. 0.655 m, th. 0.09 m; from level 833* (VW/14-15).

iii. M6015. Two small joining fragments. Ht. 0.15 m, l. 0.125 m; from level 997* (X/12-14).

iv. M6016. Small fragment (joining with a.iii?): ht. 0.10 m, l. 0.12 m; from level 997* (X/12-14).

v. M7221. Fragment: ht. 0.145 m, l. 0.46 m; from level 1059 (Y/16-17).

vi. M7222. Fragment: ht. 0.14 m, l. 0.29 m; from level 1059 (Y/16-17).

vii. M7224 Small fragment: ht. 0.08 m, l. 0.10 m; level 1059 (Y/16-17).

b. Arch with cross.

i. M7223. Small fragment of arch decorated with dentils beneath cross with petal-shaped arms on a raised disk.

Ht. 0.11m, l. 0.12 m; from level 1059 (Y/16-17). The carving and scale are similar to a i above, and this may simply be a cross at the apex of an arch of which pieces of only the left half survive, the right half having carried a corresponding stem running from right to left.

19. FIGURED SCULPTURE

a. Figured panels.

A series of small figured panels. The back surface of each is polished (suggesting that the panels decorated some sort of screen—perhaps even a templon?), each is pierced in the lower centre by a rectangular dowel-hole (for fixing, or for a pin from which something might be suspended?), and each has a frontal bust in relief which had been systematically defaced.

i. M4406, Mus 6175. Panel decorated with a bust of Christ, represented with crucifer nimbus, hair to shoulders, medium-length pointed beard, left hand draped and holding codex with cross and studs, right hand held across chest (pl. 197). He wears a tunic and a cloak across the shoulders, the folds of which are simply but effectively chiselled in flat planes. The chisel is used to indicate strands of hair and beard, and the nimbus in shallow relief, is emphasized by a lightly incised outline.

Ht. 0.38 m, w. 0.35 m, total th. 0.08 m; from level 674 (TU/16-17)

ii. M3675, Mus 6174. Panel decorated with a bust of the Virgin holding in front of her the upright figure of the Infant Christ (pl. 198). She wears a sleeved tunic beneath a cloak that crosses from the right shoulder to the left. Left forearm and hand, supporting the Infant, are exposed. The folds of the drapery are more rounded and more deeply cut than on the Christ panel.

Ht. 0.36 m, w. 0.36 m, th. 0.095 m; from level 733 (UV/15-16).

iii. M3603, Mus 6177. Panel decorated with the bust of an Apostle ("Apostle A") (pl. 199). This figure has a medium-length pointed beard and codex with cross.

Part of the left side of the face survives, showing the modelling of the cheek and the cutting of the eye (with lightly drilled pupil) and beard. He wears tunic and cloak, and his left hand, supporting the codex, is covered by the latter. The drapery is somewhat impressionistically rendered.

Ht. 0.375 m, w. 0.33 m, th. 0.07 m; from level 725* (U/15-16).

iv. M3674, Mus 6173. Panel decorated with the bust of an Apostle ("Apostle B"), with left hand exposed, supporting codex with studs and cross (pl. 200). Of the head, only the long ears have survived damage. Tunic and cloak are simplified in flat, extremely stylized folds.

Ht. 0.38 m, w. 0.355 m, th. 0.06 m; from level 733 (UV/15-16).

v. M3629, Mus 6176. Panel decorated with the bust of an Apostle ("Apostle C"), with left hand draped, supporting codex with four rectangular studs and a circular one set centrally (pl. 201). Of the head, only the projecting ears have survived damage. Tunic and cloak are fussily rendered, attempting naturalism.

Ht. 0.38 m, w. 0.34 m, th. 0.065 m; from level 725* (U/15-16).

vi. M3712, Mus 6179. Panel decorated with the bust of an Apostle ("Apostle D") with right hand held across chest, emerging from cloak, which passes from right shoulder to left and which is rendered in simply chiselled planes (pl. 202). The left hand is concealed, and there is no codex. Chisel-marks at the throat indicate a short beard. The fingers of the exposed hand are unarticulated.

Ht. 0.36 m, w. 0.34 m, th. 0.05 m; from level 733 (UV/15-16).

vii. M10747, Mus 6180, 6182. Panel decorated with the bust of an Apostle ("Apostle E"), with right hand touching a codex, which is held in the left; the head and neck are missing (pl. 203).

Ht. 0.21 m, w. 0.415 m, th. 0.06 m; from level 656 (S/19).

viii. Mus 6178. Panel decorated with the bust of an Apostle ("Apostle F"), with left hand holding staff with cross obliquely over left shoulder, right hand held up against chest with palm facing outward (pl. 204).

Preserved ht. 0.37 m, w. 0.34 m, th. 0.06 m; from level 656 (S/19).

ix. Mus 6181. Left arm only of frontal bust ("Apostle G") preserved (pl. 205).

Preserved ht. 0.215 m, w. 0.22 m, th. 0.062 m; from level 656 (S/19).

x. M3687. Upper part of panel, decorated with the bust of an Apostle (pl. 206). Only the head is preserved.

Ht. 0.167 m, w. 0.43 m, th. 0.04 m; from level 656 (S/19).

Differences of treatment make it certain that various sculptors were employed. Perhaps Apostles A and D were by the same hand, and possibly Christ and Apostle B by another. The Virgin and Infant Christ seems too competent a work to be attributed to the former group, and Apostle D too clumsy for the latter. Of Apostle G too little remains for any attribution.

More important is that the first six panels were found deep in the Byzantine destruction-layer U/16, and their defacement is thus most easily attributed to the outbreak of Iconoclasm, which thus becomes a *terminus ante quem* for the reliefs. There seems no reason not to assign them to the sixth century. After their defacement they were presumably salvaged and put into storage, so that their find-spot in the narthex may bear little relation to their original location.

b. Heads.

Twenty-nine small heads (nos. i-xxix below), all of a white marble (Dokimian?) of finer grain and warmer colour than Proconnesian and all of high technical calibre. None of the heads is intact, the majority are at least half smashed, and the impression is that damage was systematic and deliberate. In one case (xii) the neck survives, and in this and four other cases a dowel-hole shows that the head was carved separately from and affixed to the body. Occasionally the back of the head is unfinished or one side of a face carved in less detail than the other, implying that, although heads were carved in the round, bodies were in very high relief. The heads vary considerably in size (chin-to-crown heights of nos. i and ii below, for example, can be restored at ca. 0.13 m, those of nos. iii and v at ca. 0.08 m) and, at first sight, in style (particularly treatment of hair), but they also share characteristics and are all thought to be contemporary and to come from one monument. The majority (24) came from the early thirteenth-century destruction fill in R/9-11 (although, as it overlay Turkish material, this fill had clearly at some stage been redumped there from elsewhere on the site); two came from similar destruction fill in XY/16-

17, one came from an apparently (but perhaps contaminated) seventh- or eighth-century context in STU/12-13, one was from an unrecorded level in R/9-11, and two from unstratified contexts north of the church (perhaps near R/9-11).

The date of these heads was at first thought to lie in the late fourth or early fifth century, and this may well be correct, although in the absence of well-dated comparable material, it is hard to be confident. The technical calibre is remarkably high compared with monuments of this period both elsewhere in the city and in the Archaeological Museum, and, as the marble is not Proconnesian, the question arises whether the heads are the product of some prestigious workshop in the provinces. Other questions are the kind of monument (e.g., mythological, historical, or Christian figures), and the occasion of their evidently deliberate damage (e.g., by Christians overthrowing a pagan monument, or by Iconoclasts overthrowing a Christian one). The systematic damage of the heads and the fact that most of them were found in the church's destruction fill might put them in the same category as the series of figured panels discussed above (19a), which are regarded as victims of Iconoclasm; the fact that one head seems to be from an earlier (eighth century?) context than the rest does not invalidate this. Whatever the subject of the sculpture, the discovery of the heads in the church's destruction fill implies that they were in the church when it was destroyed; that they were together but not with substantial parts of the monument to which they belonged might imply that they had earlier been detached from it and were now, perhaps like the figured panels, "in store." That they were in store in the church is an argument that they were, before Iconoclasm, exhibited there, as figures on a sarcophagus perhaps or frieze. Although the heads seem to be of various distinct types, at least i, with a marked irregularity in the left eye, which seems to be deliberate, may portray an individual, and there is at least the possibility of a historical frieze. On the assumption (which may be incorrect) that the sculpture is at least one hundred years older than Anicia Juliana's church, there is the question of how such an antiquity came to adorn her edifice. There is at least the possibility that the heads are sixth-century work.

Surprising too was the discovery of fragments of hands and arms and sandalled feet, also of a marble that is finer than Proconnesian; each foot has a flat sole, not polished, but carefully dressed. Two hand fragments and two arm fragments were found in the same level (399*) as a number of the heads, but otherwise the dis-

tribution does not coincide. The chronological bracket, however, is remarkably consistent, for all twenty-four limb fragments are from Byzantine levels, except three that are from Turkish and three whose provenance is unknown; there is none from a pre-church context. The feet are on a small scale, too small to go with the majority of the heads. An attractive hypothesis, particularly as the heads appear to include types (elderly bald man, smooth-haired young man, etc.) in larger and smaller sizes, is that heads and limbs might be the stock of an atelier, but a serious objection is that they were found in mainly Byzantine contexts.

i. M6379, Mus 6021. Bearded, balding male head, chin and neck missing; bushy tufts to side of head and lock combed forward over top of head; hair chiselled wavy forward from crown, left side markedly less finished than right (i.e., figure looked to left); domed forehead with two soft grooves, deep-set irregular eyes (left eye lower than right); pupils and nostrils drilled, weak mouth, beard, and moustache chiselled; back of head dressed vertically (pls. 207, 208).

Ht. 0.12 m; from level 381* (R/9-11).

ii. M6356, Mus 6012. Upper part of male head with furrowed, domed forehead and receding hairline; drilled pupils and inner corners of eyes, deep eye-sockets; skin polished, back of hair smoothed with rasp, forward part having chiselled locks; trace of chiselled beard (pl. 209).

Ht. 0.112 m; from level 380* (R/9-11).

iii. M6381, Mus 6020. Small male head, badly broken in front and below; bald, with chiselled tufts of hair at sides of head and finely rasped at back; domed forehead with soft double groove above eyebrows (pl. 210).

Ht. 0.084 m; from level 381* (R/9-11).

iv. M6361, Mus 6014. Male head, only upper left part preserved; hair roughly finished behind, smooth above, chiselled locks in front, evidently receding over temples; skin polished, ear roughly chiselled and ear-hole drilled (pl. 211).

Ht. 0.09 m; from level 380* (R/9-11).

v. M6357, Mus 6013. Small male head, lower part of face and back of head broken: prominent brows, two furrows across forehead and vertical creases above nose, traces of beard; broad central lock of hair combed forward over receding hairline; front of hair roughly chiselled, the rest of the hair rasped smooth (pl. 212).

Ht. 0.078 m; from level 380* (R/9-11).

vi. M6657, Mus 6022. Bearded male head, upper left part missing; finely rasped hair, ear-hole, pupil, and nostrils drilled, skin polished, ear, beard, and front of hair chiselled; double groove across forehead, dowel-hole in neck (pl. 213).

Ht. 0.12 m; from R/9-11, level unrecorded.

vii. M6358, Mus 6011. Small male head, lower part of face missing, dowel hole in neck; back of head carved in round and finely rasped, short chisel-strokes for front of hair; drill used for pupils and for inner corners of eyes and in beard, skin highly polished (pl. 214).

Ht. 0.097 m; from level 380* (R/9-11).

viii. M6364, Mus 6017. Male head, lower part missing, back of head flat (i.e., trimmed vertically), hair rasped smooth with chiselled locks in front; low, smooth brow, drilled pupils and inner corners of eyes; right ear very sketchily indicated (pl. 215).

Ht. 0.107 m; from level 380* (R/9-11).

ix. M6355, Mus 6018. Male head, bearded, lower face broken; very finely rasped hair with chiselled locks in front; skin very highly polished, forehead furrowed and prominent eyebrows converging to two "knobs"; pupils drilled, ears and beard chiselled (pl. 216).

Ht. 0.11 m; from level 380* (R/9-11).

x. M6354, Mus 6010. Male head, lower part broken; drilled pupils, ears, and running-drill in beard; prominent brows, furrowed forehead, deep-sunk eyes, and polished skin; skull-cap-like hair delimited from skin by finely incised line, which turns to delimit beard; short chisel-strokes for front of hair, otherwise hair dressed smoothly with fine rasp (pl. 217).

Ht. 0.08 m; from level 380* (R/9-11).

xi. M6380, Mus 6019. Back of male head; hair rasped, roughly chiselled behind; dowel-hole (diam. 0.009 m, depth 0.014 m) in neck (pl. 218).

Ht. 0.125 m; from level 381* (R/9-11).

xii. M6363, Mus 6016. Small male head in two joining fragments, neck preserved: moustache and beard lightly chiselled, hair roughly chiselled behind, rasped on top, and cut in chunky curls over forehead and on sides; pupils and nostrils drilled; skin well modelled and highly polished, one furrow across forehead (pl. 219).

Ht. 0.126 m; from levels 365* and 380* (R/9-11).

xiii. M6764, Mus 6024. Small head, with chiselled thick waving hair swept back from forehead and temples; neck and lower part of face missing; pupils and

inner corners of eyes drilled; skin polished, concave forehead above prominent brows (pl. 220).

Ht. 0.089 m; from level 399* (R/9-11).

xiv. M6362, 6359, Mus 6015. Head in two joining fragments, lower part of face lost: thick hair swept back and outwards from forehead line, deeply drilled (with struts) in front, roughly chiselled behind; skin highly polished, forehead smooth but concave, eyebrows evidently continuous (no bridge across nose); drilled pupils, chiselled beard, lower part only of ear visible beneath hair, which is very thick at nape of neck; trace of raised muscle beneath left ear (pl. 221).

Ht. 0.12 m; from level 380* (R/9-11).

xv. M6925, Mus 6028. Head, with chiselled thick wavy hair swept back from forehead and temples; neck and lower part of face missing; two furrows across forehead; similar in form and condition to xiv, but eyes in particular less well preserved; back of head cut vertically (pl. 222).

Ht. 0.09 m; from level 563* (STU/12-13).

xvi. M6323, Mus 6005. Head (female?) with dowel-hole in neck; lower part of face (cheeks, nose, mouth, chin) broken; pupils and curls drilled; hair combed forward from crown in four rows of curls over top of head and right side; left side and back sketchily chiselled (head thus inclined to left); skin polished, forehead smooth, no eyebrows (pl. 223).

Ht. 0.105 m; from level 379* (R/9-11).

xvii. M6325, Mus 6007. Back of head, and right ear (face wholly missing); hair roughly chiselled in slightly irregular locks; prominent muscle below right ear; no drillwork (pl. 224).

Ht. 0.115 m; from level 379* (R/9-11).

xviii. M6346, Mus 6009. Upper part of head (female?); skin polished, but most of face missing; hair very rough and chunky, combed forward into ringlets, but no use of drill (pl. 225).

Ht. 0.08 m; from level 379* (R/9-11).

xix. M6324, Mus 6006. Head (female?) with dowel-hole (diam. 0.011 m) in neck, right side of face (including nose and mouth) missing; pupil and rows of curls over forehead and right side drilled; on left side and back, hair sketchily chiselled; skin polished (pl. 226).

Ht. 0.127 m; from level 379* (R/9-11).

xx. M6326, Mus 6008. Back of head and strip of left cheek only preserved; chiselled lines radiating from

crown, locks over front of head separated by running-drill ending in curls with drilled centre (pl. 227).
Ht. 0.103 m; from level 380* (R/9-11).

xxi. M10748, Mus M.71.42. Fragment of small, male, elderly head, mostly bald; furrowed brow, polished skin, deep eye-sockets, drilled pupils; ears not drilled, back of head dressed flat.
Ht. 0.046 m; from level 411 (north side grading).

xxii. M10749, Mus M.71.41. Upper part of small male head, most of face destroyed except for right eye; hair carefully smoothed with rasp, lightly chiselled in front; face polished, furrow in brow.
Measurement unrecorded; from level 411 (north side grading).

xxiii. M6827. Right half of bearded face; prominent eyebrow, drilled pupil, polished skin.
Ht. 0.57 m; from level 373 (R/9-11).

xxiv. M10750, Mus 6190. Back of male head with part of left ear; hair rasped smooth.
Ht. 0.085 m; from level 1041* (XY/16-17).

xxv. M10751. Back of male head with right ear; hair rasped smooth.
Ht. 0.06 m; from level 1041* (XY/16-17).

xxvi. M6766, Mus 6026. Fragment of wavy chiselled hair.
Ht. 0.05 m; from level 399* (R/9-11).

xxvii. M6765, Mus 6025. Lower part of bearded face, chin and left cheek and eye broken; right eye drilled.
Ht. 0.75 m; from level 399* (R/9-11).

xxviii. M6767, Mus 6027. Lower part of bearded face, broken horizontally below nose. Ht. 0.035 m; from level 399* (R/9-11).

xxix. M6383, Mus 6023. Lower part of bearded face, broken horizontally across lower part of nose.
Ht. 0.04 m; from level 381* (R/9-11).

c. Limbs.

i. M6903, Mus M.6189. Freestanding left foot wearing sandal; leg sawn above ankle and roughly trimmed to give rounded end; no dowel-hole; inside of foot polished, better finish than outside; drill used to separate toes (pl. 228).
Ht. 0.074 m, l. 0.089 m; from level 1226* (narthex sector C).

ii. M6382, Mus M.7131. Right foot as above, but toes missing; inside better finished than outside.
Ht. 0.072 m, l. 0.058 m; from level 381* (R/9-11).

iii. M10752, Mus M.6187. Right foot as above, but front part missing and outside better finished than inside.
Ht. 0.055 m, l. 0.056 m; from level 381* (R/9-11).

iv. M10753, Mus M.6195. Right foot as above, but front part missing.
Ht. 0.051 m, l. 0.055 m; from level 1162* (Z/18-aa/17-18).

v. Mus M71.30. Right foot as above.
Ht. 0.067 m, l. 0.06 m; from level 411 (north side grading).

vi. M7626, Mus M.6188. Upper front part of right foot, with four toes and sandal-thong (pl. 229).
L. 0.05 m, w. 0.045 m; from level 1037 (XY/16-17).

vii. M10754, Mus M.6196. Front part of left foot with all toes and sandal-thong; inside better finished than outside.
Ht. 0.025 m, l. 0.053 m; from level 1053* (X/17-18).

viii. M10755, Mus M71.39. Part of right foot, broken at front and ankle.
Ht. 0.04 m, l. 0.06 m; from level 411 (north side grading).

ix. M10756, Mus M71.73. Fragment of heel with sandal.
Ht. 0.034 m, l. 0.036 m; from level 411 (north side grading).

x. M10757, Mus 6206. Fragment of left foot with sandal and toes.
Ht. 0.025 m, l. 0.04 m; from level 1038 (XY/16-17).

xi. M10758, Mus 6194. Fragment of relief, with heel of left foot with sandal.
Ht. 0.11 m, l. 0.10 m, th. 0.045 m; from level 1255* (narthex sector E).

xii. M7191, Mus M.6205. Part of left hand, only fingers preserved and only middle finger intact; back of hand polished, fingers curiously unarticulated and separated by straight grooves cut by running-drill, nail on middle finger clearly outlined (pl. 230). Inside of hand roughly dressed, fingers undefined.
L. 0.065 m; from level 609* (ST/13-14).

xiii. M6904, Mus M6201. Part of left hand, only fingers preserved; back of hand polished, inside roughly cut and fingers defined. Tips of fingers broken, but lower parts of nails remain.

L. 0.038 m; from level 537* (STU/13).

xiv. M71.34. Part of right hand, only fingers preserved, tapering to well-defined long nails; back of hand polished, grooves between fingers straight and deeply cut.

L. 0.04 m; from level 399* (R/9-11).

xv. Mus M71.35 Four fingers of right hand, as above.

L. 0.04 m; provenance unrecorded.

xvi. M4342, Mus M.6197. Right wrist, with dowel-hole for junction with arm and stumps of thumb and two fingers of back-flexed hand; ball of thumb and underside of wrist rasped, back of hand and top of wrist polished; marble finer than Proconnesian (pl. 231).

Diam. of wrist 0.03 m, overall l. 0.072 m; from level 863* (VW/17).

xvii. M10759, Mus M.6200. Broken left wrist, polished on back of hand.

L. 0.05 m, diam. 0.03 m; from level 962* (6 WX/18).

xviii. M7192, Mus M.6202. Fragment with three fingers.

L. 0.03 m, w. 0.034 m; from level 399* (R/9-11).

xix. M7193, Mus M.6210. Fragment with ball of thumb and stump of first finger of left hand.

L. 0.04 m, w. 0.03 m; from level 399* (R/9-11).

xx. M7209, Mus M.6208. Fragment of wrist; from level 442 (RS/12).

xxi. M10760, M.6193. Fragment of draped (?) arm (pl. 232).

Overall l. 0.135 m; from level 1272* (narthex sector F).

xxii. M6299, Mus M.6186. Fragment of elbow in high relief, with drapery on upper arm.

Overall l. 0.112 m, arm diam. ca. 0.07 m; from level 597 (ST/13-14).

xxiii. M7208, Mus M.6199. Fragment of lower leg.

L. 0.08 m, max. diam. 0.038 m; from level 631 (S/15-16).

There were in addition four small fragments of leg or arm (Mus M.71.32, 6203, 6204), from levels 292 (PQ/14-15), 399 (R/9-11), 411 (north side grading), 1019 (X/16-17).

xxiv. M10761 Small ridged bar with a rectangular stud towards each end, clasped by a (?) finger (pl. 233).

Ht. 0.05 m, l. 0.099 m, th. 0.041 m; from level 702* (UV/14).

20. WATERSPOUTS AND GUTTERS

a. Zoomorphic waterspouts.

i. M4827. Top of head of boar's-head waterspout, snout and front of crest quite clear, eyes of head generally well modelled, water-channel roughly (but completely) cut (pl. 235).

Ht. 0.33 m, w. 0.23 m, width of water-channel 0.085 m; from level 870* (VW/16-17).

ii. M10694. Lion's-head waterspout; channel in upper surface, flattish face carved on front of block (fig. G, pl. 234).

Ht. 0.40 m, w. 0.37 m, l. 0.780 m; width and depth of water-channel 0.08 m and 0.065 m, respectively; from level 412 (O/9).

b. Waterspouts with wide, shallow open channel.

i. M3478. Ht. 0.11 m, w. 0.47 m, l. 0.61 m; from level 66 (L/9-10).

ii. M7615. Ht. 0.11 m, w. 0.44 m, l. 1.54 m; from aabb/15-16 (unstratified).

iii. M7616. Ht. 0.11 m, w. 0.44 m, l. 1.54 m (joins with above?); from aabb/15-16 unstratified).

iv. M7051. Ht. 0.07 m, w. 0.48 m, l. 1.42 m; from level 1106 (bb/15-16).

c. Waterspouts with narrow, deep open channel.

i. M1033. Waterspout with channel of semicircular section.

Ht. 0.22 m, w. 0.25 m, l. 0.71 m; from level 94 (L/14-15).

ii. M10439. Waterspout with channel of U-shaped section.

Ht. 0.255 m, w. 0.95 m, l. 0.495 m; from level 1426 (cc/17).

d. Junction-blocks.

i. M3597. Junction-block for terracotta pipes. Diam. 0.46 m, l. 0.575 m; underpass, unstratified.

e. Gutters.

i. M10446. Part of gutter (?) with triangular spout. Corner of a rectangular panel with raised border; on one side a triangular projection, which carries the border with it and which appears to be a spout.

L. 0.525 m., th. 0.105 m (0.15 m at border), depth (incl. spout) 0.39 m; from level 1426 (cc/17).

21. VARIA**a. Monogram.**

i. M145. Fragment (of pier?) with monogram in square frame surrounded by three deeply underdrilled vine-leaves with raised veins (fig. L, 11, pl. 236). The monogram is in shallow relief, the letters standing out high from the background.

W. 0.25 m; from level 122* (M/9).

b. Step.

i. M1038. Narrow double step, treads worn. No measurements; from level 94 (L/14-15).

c. Pedestal.

i. M4836. Pedestal with two adjacent sides decorated, two roughly dressed (fig. G, pl. 237). On each decorated side are elaborate crown and base mouldings and, between them, a rectangular frame enclosing a lozenge. In each of the corners of the rectangle is a triangle containing a trilobate leaf, and there is a trilobate leaf at each point of the lozenge, which encloses a second lozenge, also with leaves; at the centre of the design is a cruciform flower or plant. The upper surface of the

block is countersunk 0.01 m, leaving a dressed band 0.05 m wide above each of the decorated sides.

Ht. 1.26 m, base 0.73 m square; from level 1091* (Z/16).

d. Bird-fragments.

i. M5197. Hooked beak (of eagle?), broken off at junction with head and drilled through (ca. 0.01 m diam.) at inner corner of upper and lower beak, presumably for suspension (pl. 238). Definite hook of tip of upper beak over tip of lower. Beak to be seen from its right side (better finished), drill-hole enters this side more accurately than it emerges from the other, under surface of beak better visible from right.

Ht. 0.095 m, l. 0.105 m; from level 997* (X/12-14).

ii. M6822. Body of small bird moving to left, broken from high relief (pl. 240). Surface carefully chiselled, background deeply underdrilled, so that the bird was almost detached.

Ht. 0.08 m, l. 0.105 m, relief 0.03 m from background; from level 553 (pit J).

iii. M6577. Body of small bird in relief, moving to right (pl. 239). Predominant use of chisel for body, wings, and legs (which are both carved in round); drill for undercutting.

L. 0.095 m, relief 0.03 m; from level 594* (T/13-14).

iv. M10726. Body of small bird in relief, moving to left. Chisel for plump body and wing (which is slightly raised), characteristic drill to background. This bird is carefully carved above, as if to be seen from above (or to be located upside down).

L. 0.075 m; from level 1253* (narthex E).

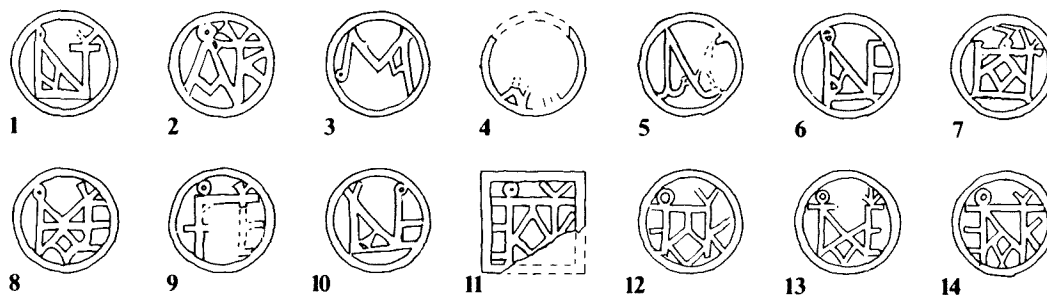


FIGURE L. Monograms on Marble Carving (not to scale), 1. 2 b iv; 2-4. 2 b iii; 5-7. 2 b i; 8. 2 a ii; 9-10. 2 a i; 11. 21a; 12. 6 a i(upper); 13. 6 a i(lower); 14. 6 a ii

v. M6360. Head of small bird in high relief, moving to left and turned slightly out from background (pl. 241). Careful chiselwork for head and eye, drill for open mouth and for undercutting; attached to background by strip only 0.005 m wide.

L. 0.052 m, relief 0.035 m from background; from level 592 (T/14).

vi. M6887. Head of small bird in high relief, moving to left. Chisel for closed beak, otherwise similar to v above. Steeply underdrilled, leaving only narrow (ca. 0.005 m) strip of attachment.

L. 0.056 m; from level 252 (OPQ/16).

vii. M3806. Fragment of wing-feathers, probably eagle (certainly not peacock). Very stiff and straight; deep cutting and drilling between feathers.

L. 0.145 m; provenance unknown.

e. Entablature-beams.

i. Entablature-beam, combining plain architrave, dentil-frieze, roundel, and cavetto, the end of the architrave having a *cyma recta* moulding (fig. G). The soffit has a circular dowel-hole towards its outer end; the other end of the block was only roughly dressed, the mouldings being discontinued for 0.33 m.

Ht. 0.14 m, w. 0.347 m, w. of soffit 0.225 m, l. 1.55 m, l. of mouldings 1.245 m, l. of dressed soffit 1.06 m, centre of dowel-hole to end of soffit 0.13 m, dowel-hole 0.085 m diam., 0.075 m deep; provenance unknown.

ii. M4880. Fragmentary entablature-beam, as i above. L. 0.901 m; from level 833* (VW/14-15).

f. Lion's head.

i. M.7465. Fragmentary lion's head.

Ht. 0.13 m; w. 0.12 m; from level 823* (V/13-14).

g. Inscribed block.

i. M3594. Fragmentary block with Latin cross in low relief and letters AΔ incised at left.

Ht. 0.60 m, l. 0.99 m, 0.82 m; provenance unknown.

h. Waste cores from drillwork.

i. Find-spots (from top left to bottom right in pl. 242) levels 165, 183*, 692, unrecorded, 94, 100, 165; l. of largest (bottom right) 0.09 m.

i. Long lobe-like elements (from pier?).

i. Find-spots (from left to right in pl. 243) 660*, 671, 671; l. of largest (left) 0.21 m; other examples from 275, 669, 671 (three more pieces), 737.

j. Fragment of pier(?), with top of large lobe and, on right, border with rosette (pl. 244).

i. W. 0.31 m; provenance unknown.

k. Three-lobed acanthus leaves.

i. 189 examples recorded (ht. of largest in pl. 245, 0.12 m).

l. Five-lobed acanthus leaves.

i. 85 examples (ht. of top left in pl. 246, 0.10 m).

m. Large cornucopiae.

i. Find-spots (from left to right in pl. 247) 65, 205, 598, 997*; l. of largest (left) 0.175 m; 66 other examples.

n. Small cornucopiae.

i. 35 fragments (5 illustrated in pl. 248), further details unrecorded.

o. Pine-cones, firmly attached at the stem-end, elsewhere deeply underdrilled, and also attached at three other points (the tip and on each side) by struts.

i. 28 examples (3 in pl. 249, ht. 0.14 m).

p. Eggs, each decorated with a cross in relief.

i. 21 examples (6 in pl. 250), ht. 0.075-0.12 m; several are supported by a stem that passes beneath, and two were evidently from the lower border of a pier-capital (one is shown in the photograph, bottom right, where a vertical rectangular cleft is clearly the rebated corner of a capital such as 5 a i or 5 b i); others could also be from a column capital, e.g. 3 d i.

q. Multi-lobed leaves.

i. 64 examples (4 in pl. 251; ht. of that on left 0.148 m, from level 722).

r. Fragment (edge of inscribed entablature?) with vine-stem, pendant leaf, and grapes (pl. 252).

i. L. 0.30 m.; from level 165.

s. Fragments of vinestem, with light surface-modelling.

i. 3 in pl. 253, th. ca. 0.03 m; from levels 51 (left), 851★, 94.

t. Bunches of grapes.

i. Individual grapes are of two sizes, ca. 0.06-0.07 m (fragments of 31 bunches) and ca. 0.02-0.03 m (fragments of 26); two fragments of the larger variety were unfinished, the grapes being simply delineated by drill-holes (one, from level 694★, is illustrated in pl. 254).

u. Fragment (from pier?) with part of very large five-lobed leaf (vine?), the surface of which is carefully modelled with raised veins (pl. 255).

i. Ht. 0.43 m, w. 0.185 m, th. 0.195 m; from level 244★.

v. Fragments of lattice. In addition to lattice on inscribed entablatures block 1 a and basket capital 3 b i, there are several other types illustrated in plates 256 and 257 (numbering from top left of former to bottom right in latter).

i. Convex, with bands 0.025 m apart (from centres); border with struts 0.045 m apart retreating at angle of ca. 110° from that of lattice.

L. 0.18 m; provenance unknown.

ii. Convex, as i but with struts below 0.06 m apart.

L. 0.10 m; from level 356.

iii. Straight border, two struts below 0.08 m apart, and 0.10 m space without struts.

L. 0.19 m; from level 331.

iv. Straight border, with lattice above and tip of leaf (ivy?) below.

L. 0.08 m; from level 1089.

v. As iv, but with concave border.

L. 0.102 m; from level 1333.

vi. Concave border, with lattice above and strut retreating from border at 90°.

vii. Convex border (rounded section) with ribbed lattice.

L. 0.105 m; provenance unknown.

viii. Ribbed lattice, curved through 90° where it touches border.

L. 0.75 m; provenance unknown.

ix. As viii, but convex.

L. 0.08 m; provenance unknown.

x. As viii.

L. 0.08 m; provenance unknown.

xi. Chunky, convex, plain lattice.

L. 0.12 m; provenance unknown.

22. DISIECTA MEMBRA

A number of pieces attributable to the church have been recognized elsewhere in Istanbul and abroad. Several of them provide valuable additions to our knowledge of the church's structural elements and of its sculptural decoration, and some provide by implication important evidence for the date of the church's collapse. The diaspora throws some light, too, on the acquisitive taste of Crusaders and others for what were in fact antiquities.

a (i). Column-capital in the Archaeological Museum at Barcelona, recognized in 1969 and described above (3 d i).

b (i-iv). Two piers and their capitals in the Venice Piazzetta, recognized in 1965 and described above (5 a ii and iii and 6 a i and ii).

c. Three basket-capitals, of type 3 a above, in the western facade of S. Marco in Venice:¹²

i. Capital of lower order at north-west corner. On north side cross-bar has retrograde inscription $\Sigma\Upsilon\Xi$, on west side AY; other cross-bars plain. On west and south sides markedly irregular tendrils.
Ht. 0.69 m.

ii. Capital of lower order at south-west corner (pl. 258). Tendrils broken on all four sides, but scars suggest that they were of regular S curve.
Ht. 0.66 m.

iii. Capital immediately east of ii. Irregular tendrils on north side at least; heavy incision on cross-bar.

d. Pier-capital found in 1978 near Edirnekapi in Istanbul of 5 a type, but without crowning cavetto.¹³

i. Mus 78.32. Ht. 0.82 m, base 0.88 m square.

e. Upper part of pilaster of 6 a (Piazzetta pier) type.¹⁴

i. Mus 4428. The upper border has been roughly dressed back and the upper part of the main panel survives, with a large pendant vineleaf above a circular monogram, flanked to left and right by formal vine-scroll with grapes and leaf in alternate loops (pl. 260). Only the top of the monogram is preserved, with a horizontal bar, which extends to the right-hand edge of the frame but not the left, supporting the small letters O and Y.

Ht. 0.645 m, w. 0.84 m, th. 0.085 m; said to have come from the region of Koca Mustafa Paşa Camii.

f. Fragment with leaf in formal vinescroll.

Exactly matched on e i above and the piers in Venice.¹⁵ From Fenari Isa Camii (Monastery of Lips), Istanbul, and now in the Archaeological Museum.

Ht. 0.21 m, w. 0.20 m, th. 0.06 m.

g. Peacock-body of type 1 b.¹⁶

i. Excavated in 1916 in the Topkapı Sarayı (pl. 261).

Ht. (including neck) 0.34 m, l. 0.41 m.

h (i-iii). Three fragmentary screens of Dokimian marble in the Zeyrek Camii (Pantocrator), Istanbul, recognized in 1967 and described above (13 a i) (pl. 171).

The following pieces can probably also be attributed to the church, but with less certainty.

i (i). Mus 176. Basket-capital, badly damaged, of type 3 a, in the garden of St. Sophia, Istanbul (pl. 263).¹⁷

j. Six zoomorphic waterspouts in the garden of the Istanbul Archaeological Museum, said to have come from the region of Saraçhane (pl. 262).¹⁸ 20 a i above may give some support to this attribution.

(i) bull (with dewlap), l. 2.19 m; (ii) bull (with dewlap), l. 1.23 m; (iii) boar (with tusks), l. 1.90 m; (iv) bull (with dewlap), l. 1.47 m; (v) lion (with mane), l. 1.47 m; (vi) lion (very primitive), l. 0.91 m (fig. G).

k (i). Fragmentary slab in Aquileia (pl. 264).¹⁹ Within a rosette-border very similar to that of pier 6 c above, a large biconical cantharus with foliate base beneath a large open ring composed of simple small out-turned leaves; a large pendant vineleaf above, and remains of subsidiary feathery leaves to left and right. If the ring framed a monogram, no trace now remains.

l (i, ii). Two small basket-capitals in the north facade of S. Marco in Venice are closely similar in height, form, and decoration to the large engaged colonnette capital (14 a i) found at Saraçhane, with which they must be closely associated.²⁰

Ht. 0.29 m.

m (i-iv). Four octagonal capitals with alternate long and short concave sides (i.e., capitals with concave sides and concave corners) in the upper order of the north portal of the west facade of S. Marco in Venice. They have recently been associated with the cruciform bases (7 c i-iii) found at Saraçhane, and it has been observed that their decoration, of exotic palmettes, would also be consistent with St. Polyeuktos.²¹

n (i). A screen in the Kunsthistorisches Museum in Vienna, which is attributed to the Veneto (pl. 265). It has recently been claimed that its "Gothic" decoration was inspired by a screen from St. Polyeuktos of type 13 a i, which must have found its way to the Veneto in the thirteenth century but is now lost.²² The Vienna screen, however, is not a copy of a lost original; it is itself an original member of the St. Polyeuktos series, which has been heavily reworked. Inspection of material (Dokimian marble), technical details of undercutting, dimensions, and the attenuated form of elements that have been pared make this quite certain.

23. PRE-CHURCH SCULPTURE

a. Heads.

i. M2750. Female head in high relief, inclined to left; hair lightly chiselled, pupils and corners of mouth drilled; badly battered, and nose missing; marble finer than Proconnesian? Traces of red paint on mouth (pl. 266).

Ht. (including neck) 0.145 m, total thickness 0.14 m (relief 0.09 m, slab 0.05 m); from level 837* (V/15-16).

ii. M6022, Mus 6004. Badly worn head, apparently in the round and turning to left; use of drill in hair and eyes.

Ht. (including neck) 0.135 m; from level 1001* (X/12-14).

iii. M10762. Female head with covered hair and ears, broken from monument in relief; roughly chiselled, no drillwork (pl. 267).

Ht. 0.23 m; from sounding below atrium pavement (level unrecorded).

b. Feet.

i. M6895, Mus 6211. Gray-green schist fragment from an Egyptian statue, perhaps a block-statue, with left foot and portion of base (top and front) (pl. 268). A column of text on top of the base, to the right of the foot, reads *ndin* (?) followed by *Hr - n - p* (a name, not necessarily that of the owner); another text on the front of the base, seems to contain parts of two titles associated with cults at Hermopolis (Middle Egypt), but could also occur at Thebes. The date is hard to establish from so fragmentary a piece but might be Dynasty XXVI or XXVII (seventh to fifth century B.C.). The name (Hernepe) is rare. (This description was kindly provided by Professor B. V. Bothmer in consultation with Professor H. De Meulenaere.)

Ht. 0.13 m, w. of front 0.08 m, depth 0.15 m; from OR/12, probably level 313 (exact provenance unrecorded).

c. Torsos.

i. M10763, Mus 6185. Nude male torso, twisted slightly to left; evidently bearded and with long hair (or the lappets of a cap?) lying on shoulders; heavy musculature, not polished (pl. 269).

Ht. 0.195 m; from level 939* (W/17).

ii. M10764. Nude male torso of very fine warm-white marble; arms missing, but left arm evidently raised, right lowered; fine strands of hair falling over shoulders towards well-formed (but male) breasts; front of piece carefully finished but not polished; very roughly dressed behind, with apparent break of attachment-strut at small of back (pl. 270).

Ht. 0.092 m; from level 1393 (aa/23).

d. Reliefs.

i. M6706, Mus 6184. Fragment of relief with frontal female figure standing with right knee bent and right ankle crossed casually over left; right elbow supported by rectangular pillar, a lock of hair on right shoulder, right breast bare; right forearm, head, left shoulder and arm, and feet missing; short himation tied at waist and falling to thighs in folds of rectangular section; folds of chiton over the legs have been defined by running-drill; drapery wound round the right elbow hangs formally in front of the pillar (pl. 271).

Ht. 0.35 m, w. 0.21 m; from level 367 (R/9-11).

ii. M7012, Mus 6098. Fragment of relief with standing frontal female figure in chiton and himation; head and

right foot missing, bare right arm hanging by side and right hand holding fold of chiton (or end of cloak, which appears to fall from left shoulder?) (pl. 272).

Ht. 0.24 m, w. 0.11 m; from level 327* (OR/12).

iii. M6939, Mus 6099. Trapezoidal grave-stele with relief of funerary banquet in recessed trapezoidal panel; on the right a man reclining on a *kline*, holding out a wreath in his right hand, and holding a cup in his left; on the left a woman seated and veiled, her right hand on her knee, her left draped and held to her face; in front of the *kline* a tripod table with a number of objects upon it (pl. 273). There are two lines of an inscription above the recessed panel and one below it; the last three letters of the second line are placed below each other along the right-hand edge of the stele:

ἰφους χαῖρε Ἄ
νειακῆας ζήσας ἔ-
τη
μ
ῆ'

γυνὴ αὐτοῦ Τειμωζή

Ht. 0.37 m, w. 0.305 m; from level 315* (QR/12).

This is by far the most common type of Roman grave-stele found in Byzantium; cf., N. Firatlı, *Les stèles funéraires de Byzance gréco-romaines* (Paris, 1964), nos. 29-90, and remarks on pp. 18-22.

iv. Fragment of grave-stele with part of reclining figure and right-hand border, as no. iii.

Ht. 0.15 m, w. 0.223 m; level unrecorded.

v. M6941, Mus 6097. Fragment of left-hand side of grave stele; lower part of seated woman wearing chiton and himation and facing right, her right arm placed on the swathed legs of a small child who sits frontally across her knees; a diminutive figure stands against the side of the chair, leaning against the left-hand edge of the recessed panel and holding her left arm across her body, her right arm to her face (pl. 274).

Ht. 0.23 m, w. 0.19 m; from level 315* (QR/12).

vi. M6937, Mus 6095. Lower part of grave-stele, with central figure standing frontally between two diminutive mourning figures, who lean against the left and right sides, respectively, of the recessed panel (pl. 276). The left-hand figure holds right hand to chin and left across body, and the right-hand figure holds right hand across chest and in his left hand a ring with two (?) keys; both have crossed legs.

Ht. 0.50 m, w. 0.53 m, th. 0.08 m; from level 315* (QR/12).

vii. M7013, Mus 6096. Part of left-hand half of grave-stele, with central (?) figure standing frontally and a diminutive mourning figure leaning against left side of recessed panel (pl. 275). The small figure wears a short tunic and holds right hand across body, left hand to face; the principal figure wears a long tunic and a cloak, which falls over the left wrist.

Ht. 0.16 m, w. 0.195 m; from level 317 (QR/12).

viii. M6938. Lower border of grave-stele, with traces of figured panel with three standing figures.

Ht. 0.42 m, w. 0.53 m, th. 0.08 m; from level 315* (QR/12).

ix. M6940, Mus 6100. Lower left-hand part of grave-stele, with gladiator advancing right; inscription on lower border Μορμύλλον (pl. 277). The technical quality of this carving is considerably higher than that of the foregoing reliefs. It appears to be the first gladiatorial relief to have been found in Byzantium.

Ht. 0.50 m, w. 0.295 m; from level 315* (QR/12).

Chapter Six

THE INLAYS AND REVETMENT

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It is NOT always possible to distinguish between paving and wall-revetment, although fragments more than ca. 0.04 m thick (mainly Proconnesian and a little green porphyry) should probably be assigned to the former, and fragments less than ca. 0.02 m thick (mainly green porphyry and *giallo antico*) are certainly from the latter. The only interior pavement to be found *in situ* was in the crypt, where the central room had a patterned marble floor of Proconnesian and lasos slabs 0.03 m thick and the ambulatory passage was tiled; the upper surface of the vault in the north-east corner of the church carried the plaster impressions of large rectangular paving-slabs, and scraps of pavement mosaic were found in the south-eastern sector of the nave. The only wall-revetment found *in situ* was one piece of Proconnesian 0.025 m thick in the north-western corner of the central room of the crypt.

Coloured marble revetment is attested in the Epigram (*Anthologia Palatina* 1, 10, 60-61), and it is probable that all vertical interior wall-surfaces above the level of the nave floor and a line of skirting were so clad, except for certain sculptured friezes and panels that adorned the sanctuary (even these were probably painted) and for certain friezes or panels of mother of

pearl, coloured glass, and other inlays in the sanctuary and western part of the church, which were presumably mounted in bitumen on slate.¹

The overwhelming majority of fragments are of Proconnesian marble, which outnumbers all other types of marble by about four to one; the Proconnesian, however, includes an unknown, but presumably large, proportion of fragments of paving, which will include that at gallery level. Of the other marbles, the most frequent are cream or dappled Dokimian, hard yellow from Chemtou in Numidia (*giallo antico*), Laconian green porphyry, Thessalian green breccia (*verde antico*), streaked dark red and grey from lasos, and Egyptian red porphyry; there are smaller quantities of alabaster, of a cream and pink marble from Bilecik in Bithynia, of a black marble veined with white, which is said in Istanbul to come from Adapazarı, also in Bithynia, and of a number of other types that we were unable to identify.² There was also a considerable amount of slate, which is included in the quantitative listing below, because it is assumed to represent the backing of inlay which in certain parts of the church served as wall-cladding, instead of marble revetment.

Catalogue of Fine Inlay, Glass, and Shaped Marble

LIKE many contemporary churches, St. Polyeuktos had as part of its wall decoration a number of panels intricately inlaid with carefully shaped pieces of stone, glass, and mother of pearl. The evidence for this consists in abundant pieces of inlay and in associated finds of slate, which, as elsewhere, would have served as bedding to which the inlay was affixed, probably with bitumen. One concentration of these finds was, as

might be expected, in the area of the sanctuary (particularly level 94), where the inlay had clearly fallen from the sanctuary; another was deep in the grand cistern (e.g. levels 1001★, 1005★).

There follow catalogues of the amethyst, agate, mother of pearl, a white stone, the glass, and shaped marble.

1. FINE INLAY

a. Amethyst.

i. Square. Polished on front, some smooth, some rough on back; 0.034–0.05 m square, thickness 0.005–0.012 m; probably all from inlaid columns (chap. 5 catalogue, 4 a i–viii). Levels 61 (one square), 94 (two squares, and three fragments), 163* (two squares and one fragment), 169* (two squares and twelve fragments), 206 (six squares and seven fragments), and 332 (one).

b. Agate (selected examples in fig. A). Mostly brown and white banded; all pieces (except one) smooth on both sides, polished on front.

i. Diamond-shaped. One piece, ht. 0.063 m, w. 0.048 m, level 94; other fragments from levels 94 (four pieces), 183* (one piece), and 224* (one piece).

ii. Rectangular. One piece 0.033 × 0.04 m, level 94; another 0.021 × 0.32 m, level 186*.

iii. Curved. One piece w. 0.02 m, l. 0.055 m, level 94.

iv. Round. One fragment apparently circular, est. diam. 0.12 m.

Small unclassifiable fragments came from levels 61 (two), 94 (three), and 543 (one).

c. Mother of pearl (selected examples in fig. A).

i. Serrated leaf (plain). Three examples, l. 0.065 m, 0.058 m, and 0.05 m, respectively in level 833*; level 1336* (two), and one each from levels 87*, 729*, 934*, 1003, 1005*, and 1151.

ii. Serrated leaf (scratched pattern). Seven examples, l. 0.043–0.052 m, and five fragments from level 1005*; level 1001* (three), 833* (two), and one each from levels 1003, 1293, 1345, and 1382.

iii. Leaf. One example, l. 0.037 m from level 87*; one each from levels 94, 1005*, and 1334*.

iv. Petal. Two examples, l. 0.058 m, and four fragments from level 1005*; level 833* (two), one each from levels 831* and 834*, and three examples without provenance.

v. Roundel. Six examples, diams. 0.036 m, 0.035 m, 0.03 m, 0.028 m, 0.02 m, 0.017 m, from level 1005*; one each from levels 94, 837*, 859, 872*, 901, 1151*.

vi. Triangle. One example, equilateral with sides 0.037 m from level 953; one each from levels 833* and 1336*.

vii. Strip. Two examples, l. 0.027 m and 0.029 m and w. 0.013 m from level 1005*; also in levels 87* (four), 238, 480*, 502*, 673, 677, 700* (three), 729* (nine), 733, 830* (four), 831* (six), 844 (two), 909* (six), 995*, 997*, 1000*, 1118*, 1144*, 1203, 1259, 1266*.

viii. Strip with diagonally cut end. Two examples, w. 0.013 m and 0.014 m from level 831*; one each from levels 995*, 1000*, 1094*, 1135.

ix. Curved strips. One example, l. 0.034 m, w. 0.008 m, from level 1005*, another without provenance.

x. Lozenge. One example l. 0.047 m, ht. 0.022 m, from level 729*; another without provenance.

xi. Semicircle. One example, diam. 0.035 m from level 1005*; another from level 859.

xii. Perforated semicircle. One example diam. 0.047 m, perforation 0.012 m, from level 1005*, one from 833*.

xiii. Rosette. With six petals, diam. 0.023 m from level 1299.

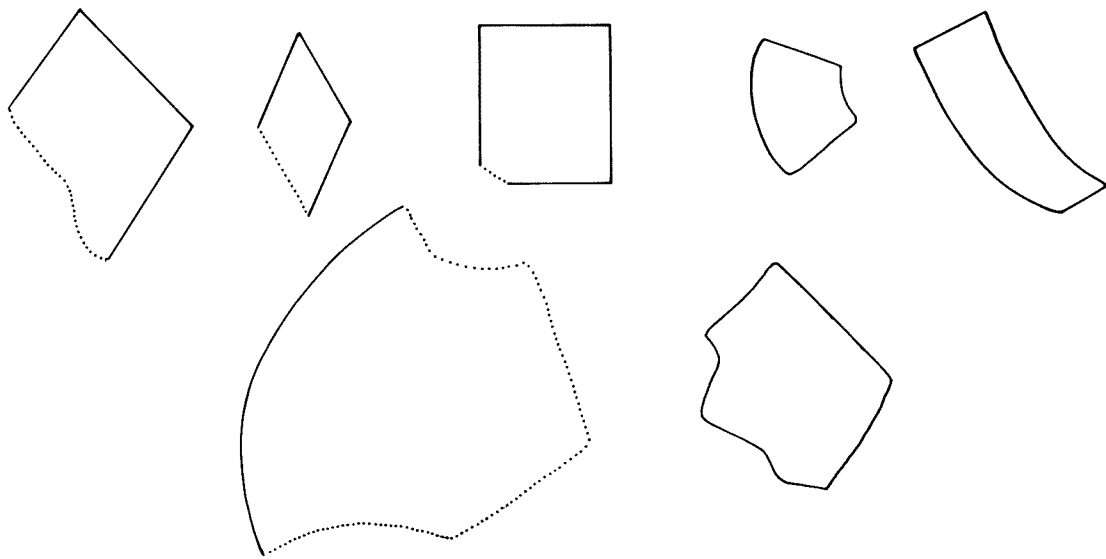
xiv. Half-crescent. One example l. 0.033 m, w. 0.015 m from level 1005*, four examples from level 602*.

d. Very soft white stone (limestone?) (selected examples in figs. A and B). This is of varying degrees of hardness, and for a long time we thought it to be plaster. Some pieces were smooth on both sides, others rough on the back; the shaping was done mainly by clipping (as with the glass inlay, below).

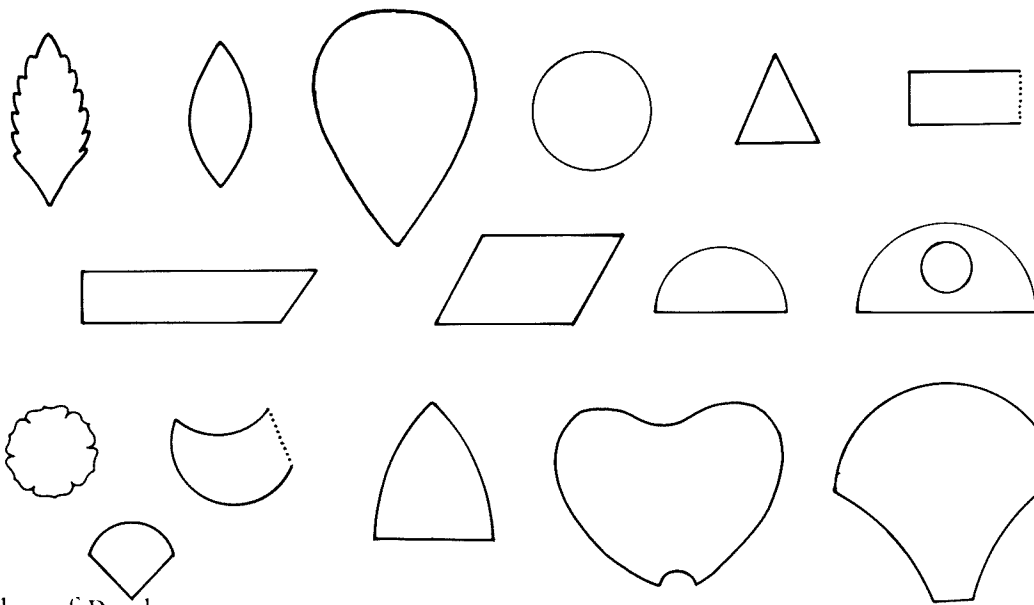
i. Straight bars. Ninety-four examples of various widths (majority 0.01 m, some 0.015–0.018 m, a few 0.006 m) from levels 61, 86, 94 (forty-three examples), 102 (two), 163* (two), 213*, 224* (four), 1001* (four), 1005* (thirteen), 1010, 1128*.

ii. Curved strips. Forty-four examples from level 61, thirty-three examples from level 94 (twenty being 0.018 m wide, outer diam. 0.40–0.50 m; 3 being 0.007 m wide, outer diam. 0.075 m); also from levels 102, 1001*, 1002, 1009* (three).

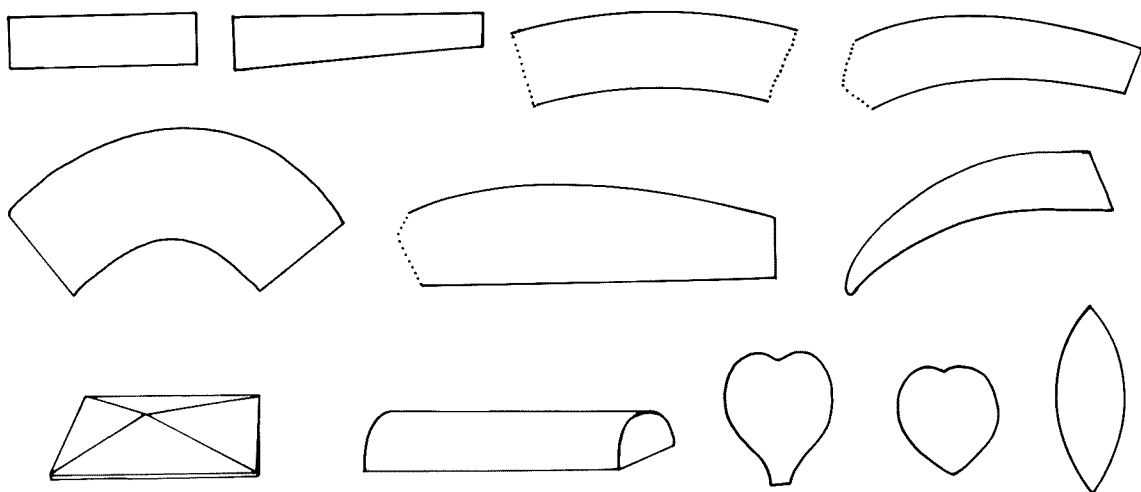
iii. Pyramids. Four examples from level 94 (three being l. 0.053 m, w. 0.033 m, th. 0.014 m.); one example from level 183* (l. 0.046 m, w. 0.03 m, th. 0.0105 m).



Agate



Mother of Pearl



White stone

FIGURE A. Selected Inlay (scale approximately 1:2)

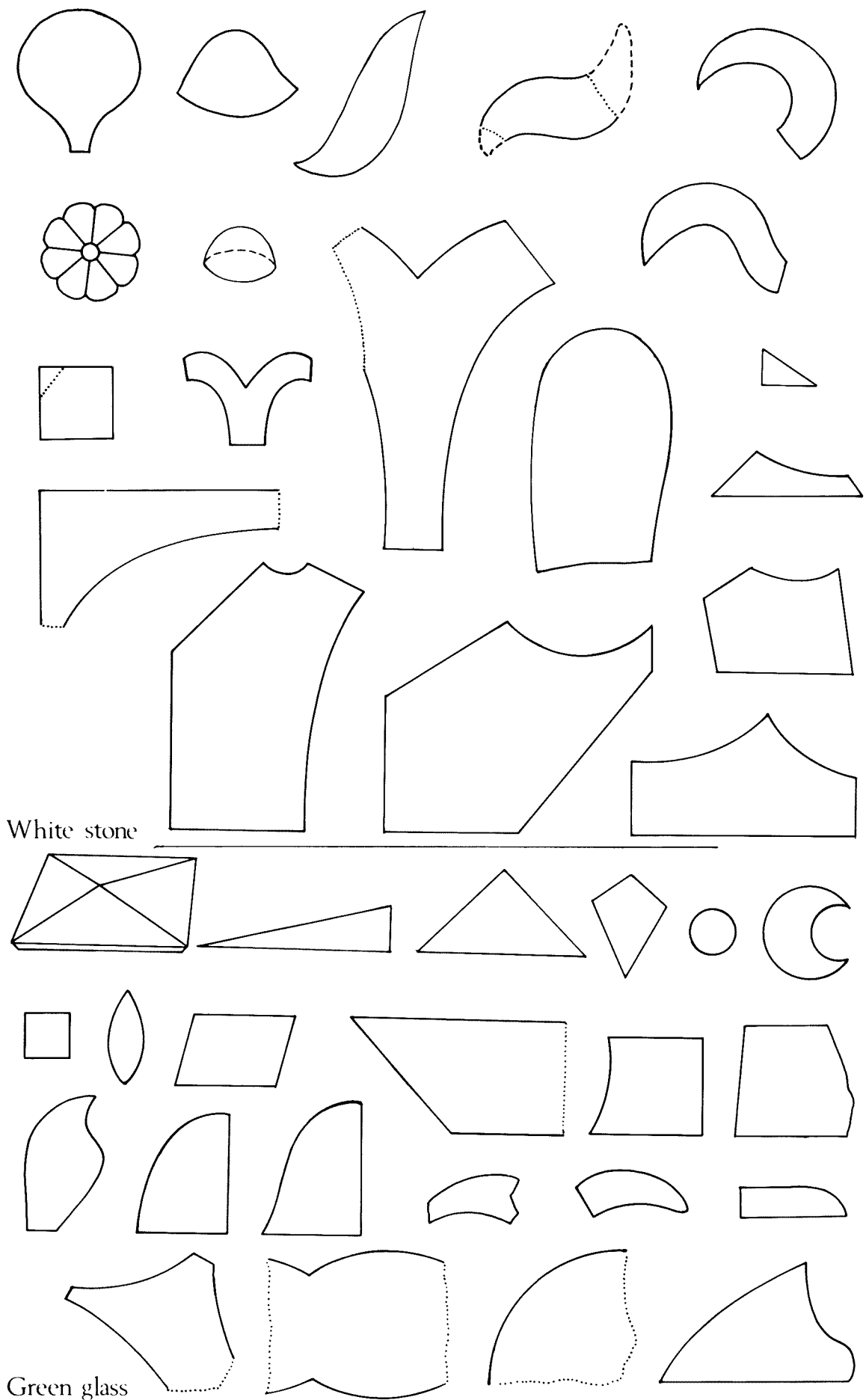


FIGURE B. Selected Inlay (scale approximately 1:2)

iv. Bars of domed section. Four examples from level 61 (ht. 0.017 m, w. 0.013 m, l. 0.045 m; ht. 0.019 m, w. 0.014 m, l. 0.064 m; ht. 0.013 m, w. 0.016 m, l. 0.08 m; ht. 0.015 m, w. 0.018 m, l. 0.07 m); also from levels 94, 163*, 186* (two), 213*, 224* (two).

v. Irregular petals. Five examples from level 94, varying in length from 0.047 m to 0.032 m.

vi. Half-crescents. Two from level 94, one from 1009*.

vii. S-shapes, pointed at each end. Four examples (l. 0.06 m) in level 61, one each in levels 94 and 163*.

viii. Perforated rosette with eight petals. From level 593* (diam 0.033 m, perf. 0.007 m, th. 0.01 m).

ix. Small dome. From level 94 (diam. 0.024 m, ht. 0.019 m).

x. Y-shapes (arcading?). One example from level 94 (ht. 0.118 m, w. 0.09 m); another from level 1010 (ht. 0.03 m, w. 0.043 m).

2. GLASS.

There were various colours of glass inlay found on the site.

Two shades of opaque green—a yellowish (apple) green, and a bluish (turquoise) green: When these shades were used in mosaics, they may have given subtle gradations to the pattern; but for inlays they were probably used indiscriminately. On some pieces the colours mix.

Opaque blue (but some pieces, of a more bubbly consistency, almost translucent): Within individual deposits, there was a great variation in the present colour of fragments. Some were blue, others had a decayed surface giving a silvery tint, others seemed to be covered in a black deposit. Some of the black was like paint; if the painting was deliberate, this was not part of the original design, as the same black covered one of the yellow and gold fragments. On other pieces the black was part of the colouring of the glass, for there were some fragments that were part blue and part black.

Gold: A few pieces have gold leaf below the surface. The background was transparent brownish yellow, and a layer less than 0.0005 m thick of transparent, colourless (?) glass protected the gold leaf.

"Millefiori." Opaque cream or white was used for the

tubes or rods, and a dark transparent green or blue for the background. On some pieces the division between the bundles of rods is visible on the front.

Dimensions: The green and blue were generally 0.004 m thick, but there was greater variation in the blue, 0.003–0.008 m thick. The yellow glass (with gold) was 0.005–0.007 m thick. There were only a few pieces of "millefiori," and these were generally thicker, ca. 0.007 m. The shaped pieces were mostly small, and few joins were made. The largest piece came from level 1001* and consisted of three joining fragments of blue glass, forming part of a square or rectangular tile 0.12 × 0.084+ m (one side was complete, with both corners and parts of the adjoining sides).

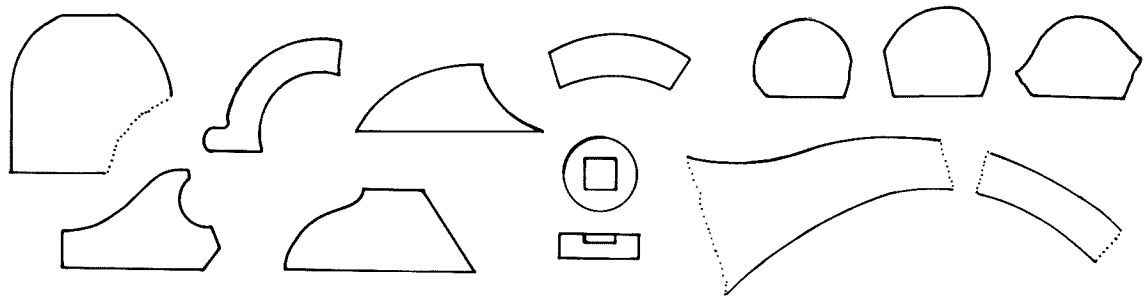
Shapes: The original pieces from which shapes were cut were square or rectangular. The backs were rough with impressions (and some grains embedded) of sand; the edges had a smooth, curved profile; a few corner-fragments survived, with the mark of the rod (a small depression set obliquely) used to spread the glass or stretch it. Two methods were used for trimming the glass into shapes: A line was incised on the surface; then the glass was tapped sharply, causing it to break cleanly along that line. On some pieces traces of the incision remain where the break was not quite clean. With many fragments, when the shape is neither regular nor repeated in other pieces, it is often impossible to distinguish this type of intentional break from the accidental. In the second method, smaller shapes and more precise outlines were obtained by clipping with pincers. On many pieces these two types of edge occurred together and a few pieces displayed a natural curved edge as well as the other two types of edge.

a. Opaque green glass (selected examples in figs. B and C).

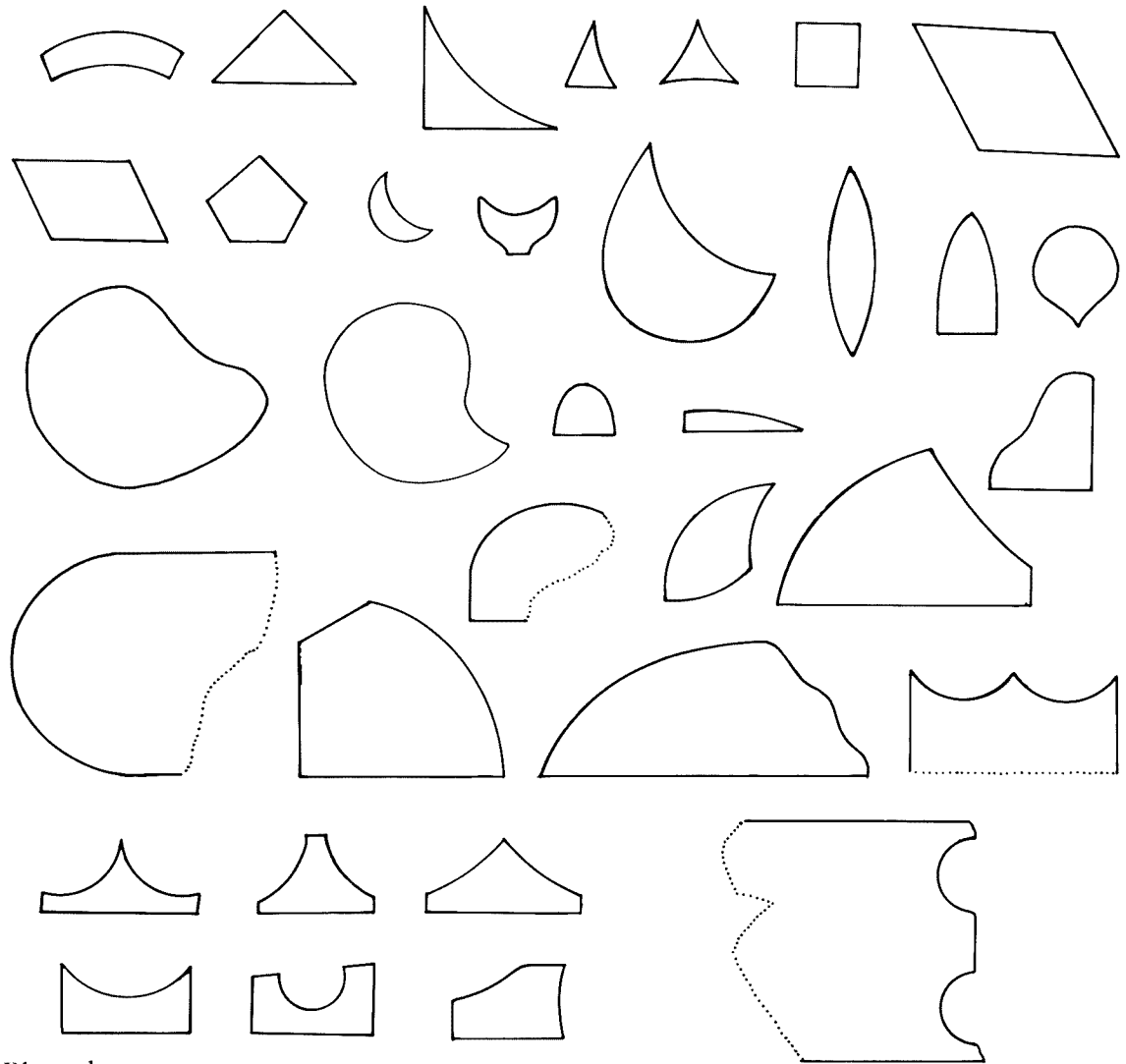
i. Pyramids. 13 examples (3 fragmentary), ht. 0.015 m, l. 0.06 m, w. 0.032 m; all were from the area of the apse (7 from level 94), except for one from level 224* and one from level 1000*. The edges were either bevelled or clipped.

ii. Rectangular strips. 415 examples, widths 0.008–0.04 m, mostly ca. 0.01 m; largest groups were from levels 94 (46 fragments) and 1005* (92); other levels yielding 10 or more were 165, 694*, 729*, 831*, 837*, 1259*, 1266*.

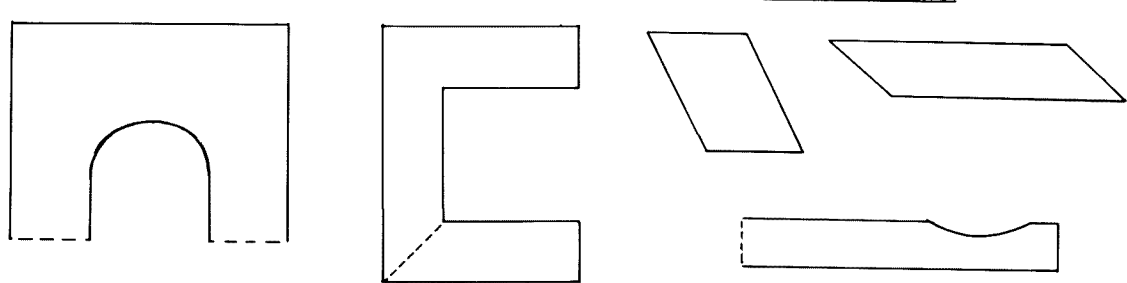
iii. Triangles. Ca. 80 examples, the majority right-angle isosceles (base 0.02–0.065 m), 2 right-angle scalene (hypotenuse 0.057 m and 0.07 m), and 1 equilateral



Green glass



Blue glass



Yellow Numidian

FIGURE C. Selected Inlay (scale approximately 1:2)

(sides 0.037 m). Again, the major concentration was in the area of the apse (levels 55*, 94, 165, 169*) and a smaller one in the grand cistern (1005*).

iv. Squares. Ca. 14 examples, sides 0.017–0.042 m, but majority 0.03 m, from apse levels (55, 94).

v. Rectangles. Ca. 30 examples, of which 19 from level 1001* (0.017 × 0.021 m [5]; 0.02 × 0.26 m [4]; 0.018 × 0.03 m [5]; 0.024 × 0.03 m [5]), several others from cistern area, only 4 from area of apse (level 94).

vi. Kite-shaped pieces. 3 only, ht. 0.035 m, w. 0.025 m, from level 94.

vii. Circles. 9 examples of small discs, diam. 0.012–0.18 m, the majority (including 4 from level 1001*) 0.015 m, the largest with a square depression. There were a few fragments of larger circles, e.g., one of 0.09 m diam. also from 1001*.

viii. Crescent. 1 example diam. 0.026 m, from level 1442; perhaps not ancient?

ix. Petals pointed at both ends. Several of these, particularly from the area of the apse (levels 55 and 61), lengths 0.017–0.037 m.

In addition to the above, there were curving points, long, narrow pieces with converging curves, many irregularly shaped pieces, and many small fragments. Many of the irregularly shaped pieces had sides concave to frame circles of ca. 0.16 m, 0.12 m, and 0.04 m diam., or convex to form circles of ca. 0.06 m, 0.14 m, and 0.30 m diam.

b. Opaque blue glass (selected examples in figs. B and C).

i. Rectangular strips. Ca. 635 examples, 0.009–0.018 m wide, but mostly 0.011–0.012 m; large groups from layers 94 (265 pieces, ca. 8 m in total length), 55* (37), 169* (30), and 1001* (33). Level 833* produced a number of wider strips, from 0.046–0.056 m.

ii. Curved strips. Ca. 65 examples, generally 0.006 m wide; diameters 0.06m, 0.08m, and 0.28 m. Groups from layers 55* (10), 94 (39), 1001* (10), and 1387 (10).

iii. Triangles. Ca. 90 examples, the majority right-angle isosceles (base 0.03–0.065 m), four right-angle scalene (hypotenuse 0.05–0.06 m). Whereas most were straight-sided, 12 had one concave curved side, 13 had two, and 3 had three.

iv. Squares. 10 examples with sides 0.015–0.017 m; 8 larger, with sides 0.022 m; 1 (fragmentary) with sides 0.031 m and central circular perforation 0.016 m diam. (from level 94).

v. Rectangles. 8 examples, of which 2 (0.031 × 0.062 m) from level 94, 3 (0.019 × 0.029 m) from 855*, and 1 (0.12 × 0.081 + m) from 1001*.

vi. Lozenges. Ca. 6 examples, of which 4 (ht. 0.065 m, w. 0.028 m) from level 94.

vii. Pentagons. 3 examples, irregular and of different sizes (ht. 0.021 m, 0.028 m, and 0.063 m) from level 94; 1 (ht. 0.022 m) from 541; another similar, without provenance.

viii. Semicircles. 2 examples (diam. 0.053 m and 0.058 m), both from level 94.

ix. Crescent. 1 only (diam. 0.02 m), from level 541.

x. Petals. Ca. 20 of various forms (pointed at one or both ends), 7 from level 94, and 4 from 1005*.

In addition to the above, a large number of other petal-like fragments, and pieces with one of their sides cut in a double-curve.

c. Yellow glass with gold leaf. Comparatively few pieces were found, the majority from the area of the apse.

i. Rectangular strip. 24 pieces, w. 0.011 m–0.016 m.

ii. Curved strip. 6 pieces, w. 0.006–7 m, diam. 0.04 m.

iii. Square. 4 examples, sides 0.011 m–0.03 m; 1 (from level 941*), a gold leaf (sides 0.017 m) at its centre; edges clipped.

iv. Rectangle. 2 examples, sides 0.025 m–0.035 m.

v. Diamond. 1 only, sides 0.035 m.

vi. Equilateral triangle. 3 examples, sides ca. 0.02 m. Twenty-six other fragments were noted.

d. Millefiori. Only small amounts were found, all (except two pieces which were from Turkish levels) being from Byzantine levels in the area of the apse. The colours were dark blue or green transparent glass patterned with tubes of opaque white glass (in one case, opaque green). The majority (22 irregularly shaped pieces and 18 fragments, covering an area of ca. 0.13

m square) came from level 94, one (a triangle with two sides 0.16 m and 0.23 m at right angles) from 55*, and one each from 88*, 169*, 904, and 1457.

3. SHAPED MARBLE.

Specifically shaped pieces occurred in twelve types of marble. Unfortunately, thicknesses and in many cases find-spots were not recorded. The following, however, will give a general impression of the material.

a. Proconnesian. Some shapes are precise with crisp outlines, others less precise with edges worn and rounded. The pieces vary in thickness from 0.019 m to 0.055 m, the majority being ca. 0.025 m.

i. Rectangular bars. 43 pieces, ranging in width from 0.02 m to 0.15 m, the majority being 0.03 m to 0.05 m.

ii. Curved bars. 15 pieces, ranging in width from 0.08 m to 0.023 m and in diam. from 0.22 m to 0.60 m.

iii. Squares. Ca. 104 examples, with sides 0.18 m (1 piece), 0.11 m (3), 0.095 m (9), 0.08 m (2), 0.07 m (18), 0.06 m (36), 0.055 m (15), 0.045 m (6), 0.04 m (12), 0.03 m (2).

iv. Triangles. Right-angle isosceles: 49 examples, sides 0.15-0.04 m, the majority ca. 0.14 m; scalene: 7 examples, sides 0.04-0.075 m; acute isosceles: 22 examples, sides 0.045-0.10 m.

v. Pentagons. Square with one corner deliberately removed: 14 examples, sides 0.05-0.295 m, the majority (11) 0.085-0.13 m; irregular: 3 examples.

vi. Hexagons. Regular, with equal sides: 6 examples, widths (from side to side) 0.045-0.13 m; with two long sides opposed: ca. 59 examples, ranging in width from 0.08 m to 0.11 m and in length from 0.08 m to 0.22 m.

vii. Heptagons. Irregular, with five adjacent sides as of an octagon and two sides as of a square: 4 examples, mean diam. ca. 0.10 m.

viii. Octagons. 44 examples, diam. (from side to side) 0.08-0.17 m, the majority (32) 0.09-0.105 m.

ix. Circles. Ca. 80 examples, diam. 0.025-0.16 m.

x. Petal-shape. Pointed at both ends: 36 pieces, l. 0.07-0.11 m.

In addition to the above were several pieces of various shapes, including trapezium, kite-shape, half-crescent, and double-curve.

b. White Dokimian.

i. Straight bars. 23 examples, w. 0.018-0.09 m.

ii. Curved bars. 3 examples, w. 0.025-0.042 m, diam. 0.16-0.75 m.

iii. Squares. Sides 0.048 m (3), 0.055 m (1), and 0.033 m (1).

iv. Triangles. Right-angle isosceles (6 examples, sides 0.04-0.07 m); equilateral (2 examples, sides 0.07 m and 0.055 m); 7 fragments.

v. Hexagons. 2 examples, l. 0.11 m, w. 0.065 m.

c. Dappled Dokimian.

i. Straight bars. 9 examples, w. 0.024-0.043 m (8), 0.075 m (1).

ii. Triangles. Right-angle isosceles (1 example, sides 0.07 m); equilateral (3, sides 0.06-0.08 m); right-angle scales (1, sides 0.09 m, 0.11 m).

iii. Hexagons. 2 examples, 0.16 m and 0.05 m.

iv. Octagons. 6 examples, hts. 0.095-0.14 m.

v. Petals. 2 two-pointed examples, l. 0.01 m and 0.085 m.

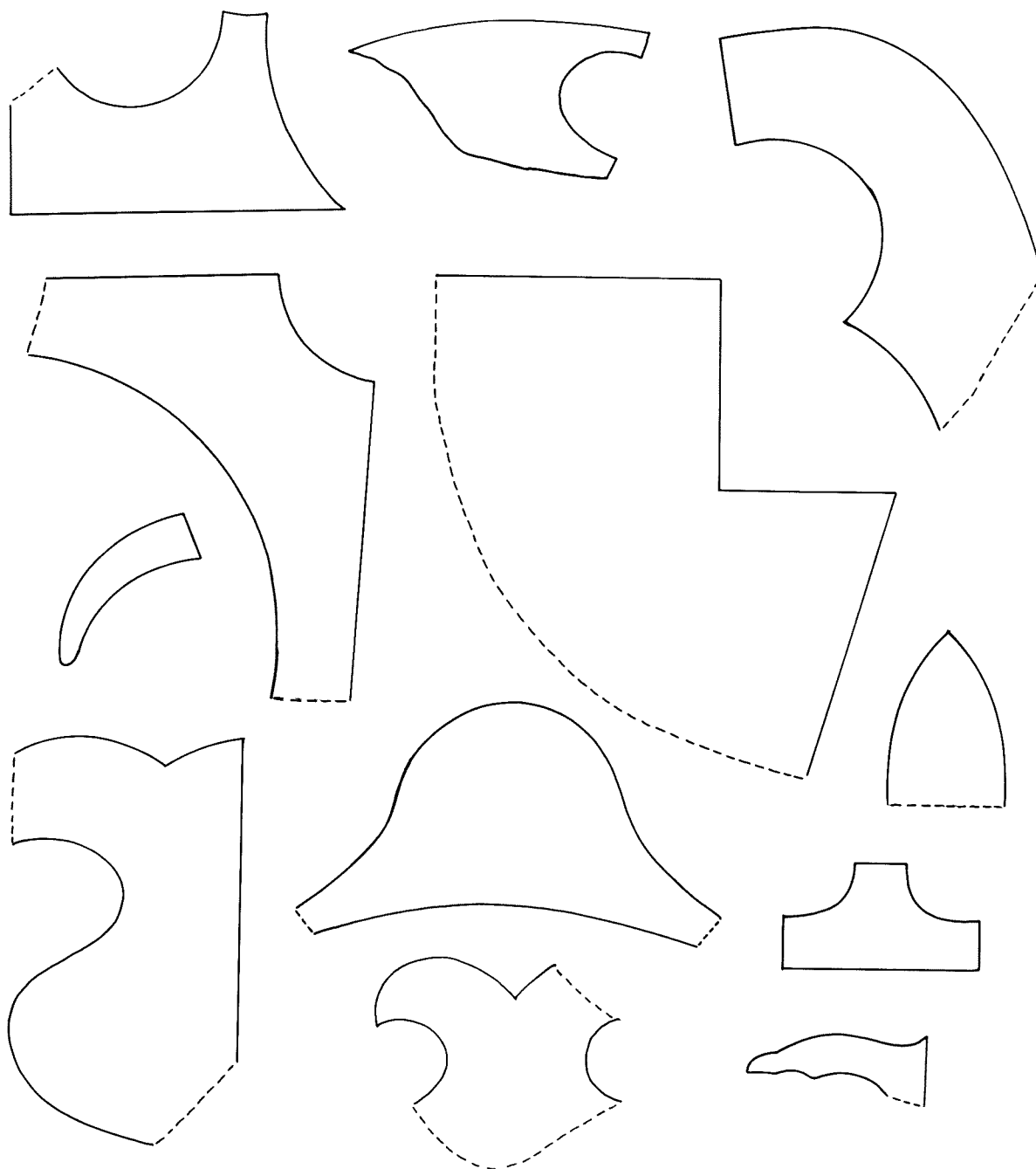
vi. Semicircle. 1 example, diam. 0.18 m.

vii. Quarter-circle. 1 example, radius 0.07 m.

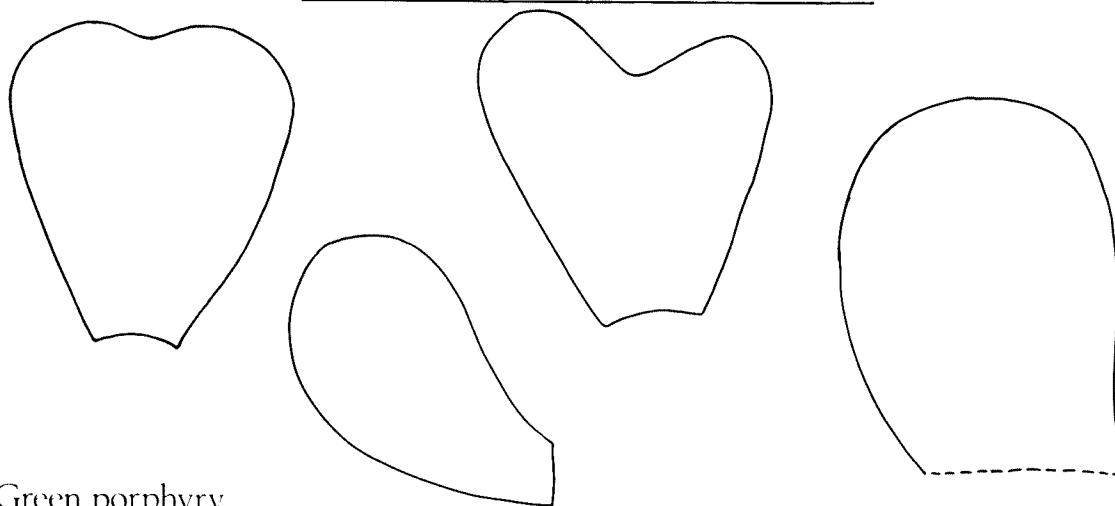
viii. Several fragments of large panel with bevelled edge; ht. more than 0.34 m.

d. Yellow Numidian (*giallo antico*) (selected examples in figs. C and D).

i. Straight bars. 1,320 pieces, mostly 0.05-0.15 m in length. A few complete examples, e.g., w. 0.08 m, l. 0.025 m. Most are ca. 0.02 m thick, but smaller pieces (less than 0.02 m wide) are sometimes thick, sometimes thin (0.005-0.007 m). It will be seen that the majority are 0.01 m to 0.03 m wide, and that there is a substantial group 0.08 m wide.



Yellow Numidian



Green porphyry

FIGURE 1D. Selected Inlay (scale approximately 1:2)

INLAYS, REVETMENT: 3. SHAPED MARBLE

<i>Width (m)</i>	<i>No. of Pieces</i>	<i>Width (m)</i>	<i>No. of Pieces</i>				
0.095	1	0.04	13	0.015	10	1½	0.08
0.08	48	0.037	6	0.014	2	¼	0.06
0.075-0.079	6	0.035	8	0.014	5	1	0.07
0.07	9	0.03-0.033	73	0.014	6	1	0.10
0.065	2	0.027-0.03	159	0.014	1	—	0.14
0.06	2	0.025-0.06	168	0.013	2	¼	0.05
0.055	3	0.02-0.04	99	0.013	1	—	0.07
0.05	9	0.015-0.02	173	0.013	16	2⅔	0.08
0.045	17	0.01-0.014	212	0.013	4	½	0.09
				0.013	6	¾	0.11
				0.013	4	½	0.12
				0.012	1	—	0.11
				0.012	1	—	0.12
				0.012	1	—	0.17
				0.011	1	—	0.08
				0.011	1	—	0.10
				0.009	1	—	0.25
				0.008	1	—	0.19
				0.007	1	—	0.08

ii. Curved bars. 701 pieces, the majority 0.015-0.03 m thick.

<i>Width (m)</i>	<i>No. of Pieces</i>	<i>No. of Circles the Pieces Will Make</i>	<i>Inner Diameter</i>
0.055	3	¼	0.40
0.05	4	¼	0.46
0.05	7	½	0.40
0.045	1	—	0.60
0.045	11	½	0.55
0.04	15	1	0.55
0.04	3	¼	0.31
0.04	2	—	ca. 0.80
0.037	8	¼	0.55
0.033	1	—	0.18
0.03	1	—	0.55
0.03	1	—	0.18
0.027-0.03	87	¾	ca. 0.75
0.025	1	—	0.12
0.025	36	1¼	ca. 0.75
0.02	31	1¼	0.55
0.02	35	1½	0.42
0.02	55	4	0.28
0.02	20	2	0.23
0.02	238	25	0.21
0.02	25	3	0.19
0.02	9	1	0.17
0.02	2	¼	0.13
0.019	3	¾	0.07
0.017	2	⅓	0.08
0.017	4	⅞	0.09
0.016	3	½	0.06
0.016	5	1	0.07
0.016	10	1½	0.08
0.016	8	1	0.10
0.016	1	—	0.11
0.016	4	⅓	0.12
0.016	1	—	0.32
0.015	2	½	0.04
0.015	2	¼	0.05

There were also 8 pieces of quarter-round section (0.025 m wide and thick), with inner curve diam. 0.55 m.

iii. Triangles. Right-angle isosceles: two sides 0.145 m (1 example), sides 0.045 m (2), Right-angle scalene: sides 0.05 m, 0.06 m, 0.07 (1), and 0.035 m, 0.045 m, and 0.05 m (1).

iv. Squares. Sides 0.07 m, 0.053 m, and 0.03 m (1 each).

v. Lozenges. Sides 0.04 m and 0.03 m. (5 examples).

vi. Rectilinear pieces. Various shapes as fig. C.

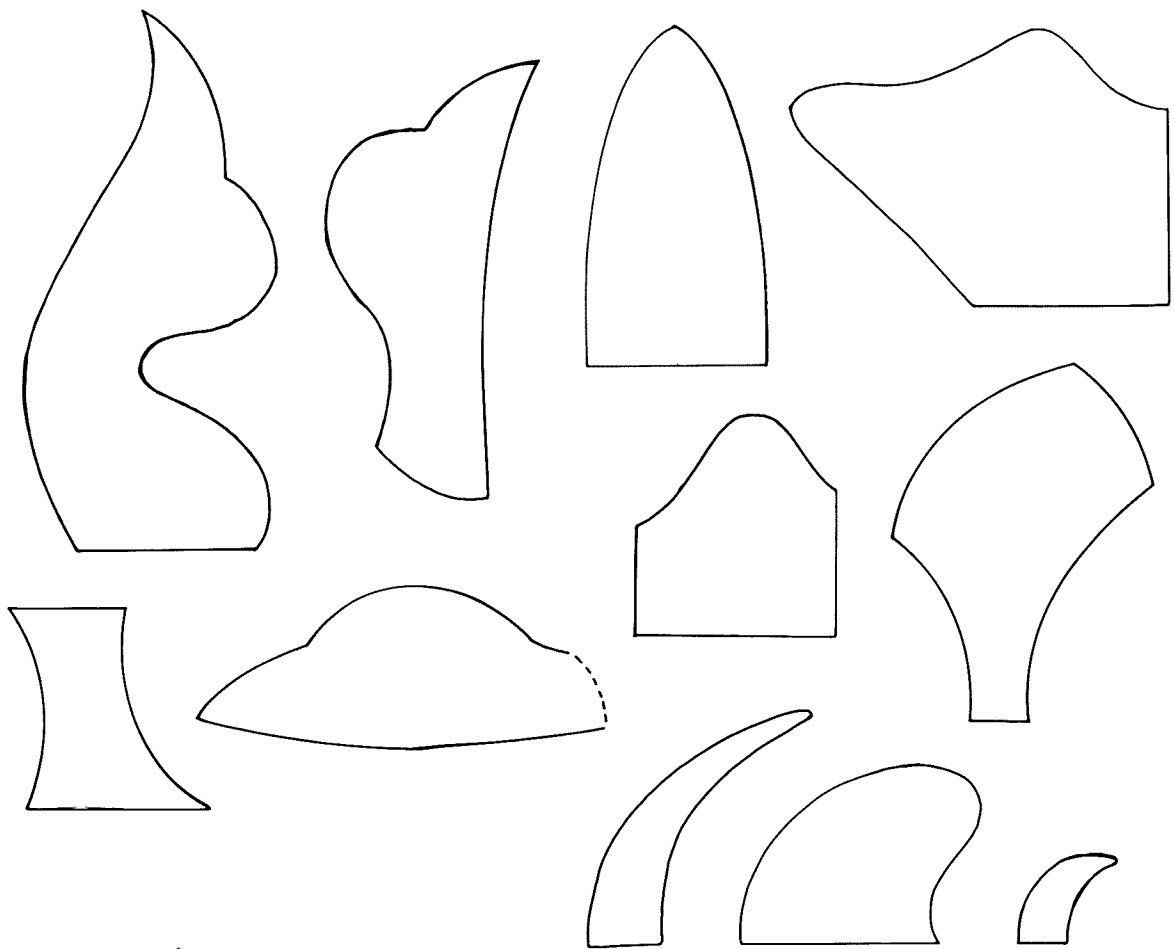
vii. Curvilinear pieces. A great variety of shapes, as fig. D.

e. Laconian green porphyry (selected examples in figs. D and E). The majority of shaped pieces were roughly trimmed; only a few had edges precisely dressed. Several have just one edge smooth and may thus be reused fragments.

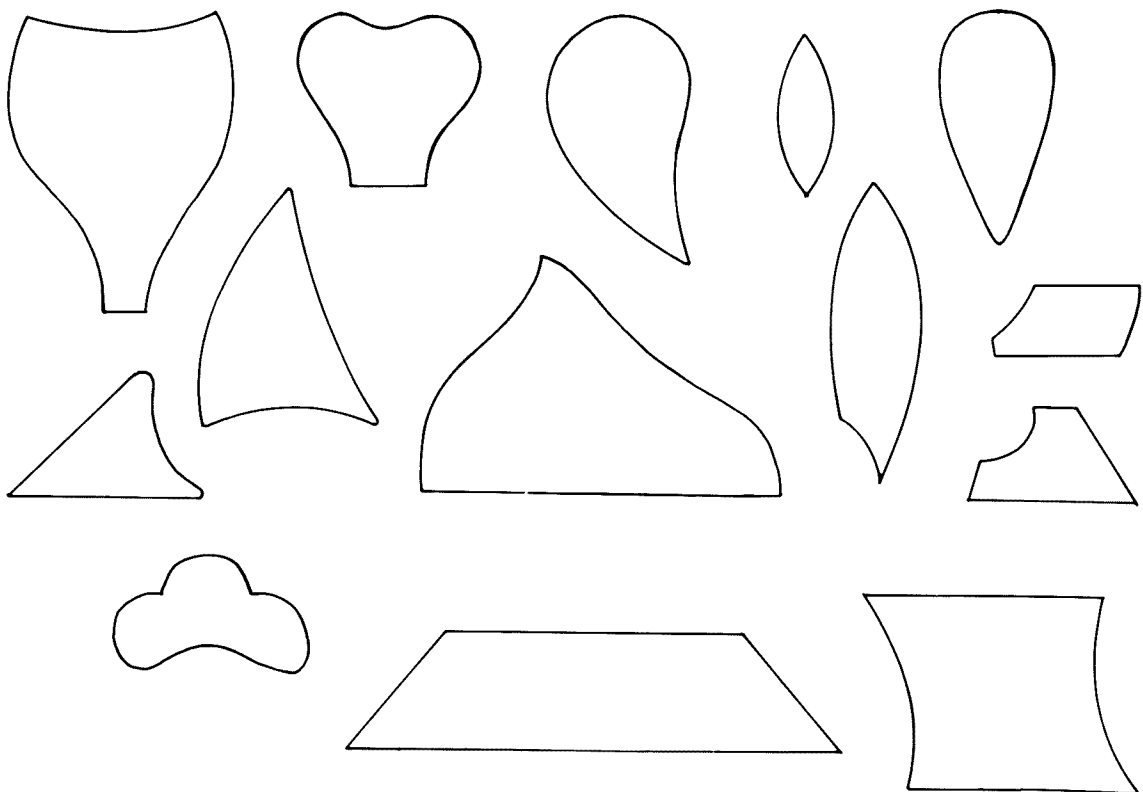
i. Straight bars. Ca. 225 examples, varying in width from 0.125 m to 0.007 m, the majority being 0.03-0.04 m.

ii. Curved bars. Ca. 20, varying in width from 0.012 m to 0.055 m, and in diam. from 0.04 m to 0.42 m.

iii. Triangles. Right-angle isosceles: 58 examples, sides 0.02-0.075 m.



Green porphyry



Red porphyry

FIGURE E. Selected Inlay (scale approximately 1:2)

- iv.** Squares. 9 examples, sides 0.02-0.05 m.
 - v.** Pentagon. 1 example, with two sides parallel: ht. 0.06 m, w. 0.05 m.
 - vi.** Lozenges. 6 examples.
 - vii.** Circles. 7 examples and 10 fragments, diams. 0.02 m to 0.095 m.
 - viii.** Various. A large number of leaf, petal, and other irregular shapes, some of them illustrated in figs. D and E.
- f.** Thessalian green breccia (*verde antico*).
- i.** Straight bars. Many fragments 0.165 m wide; also 0.33 m (1 example), 0.08 m (1), 0.06 m (2), 0.04 m (1).
 - ii.** Curved bar. 1 example, w. 0.02 m, diam. 0.06 m.
 - iii.** Triangles. Right-angle isosceles (1 each with sides 0.16 m and 0.08 m); right-angle scalene (1 with sides 0.18 m and 0.12 m).
 - iv.** Squares. Sides 0.31 m (2 examples) and 0.04 m (1).
 - v.** Circles. 1 circle 0.055 m diam., another (fragmentary) 0.20 m.
- g.** Iasos.
- i.** Straight bars. Ca. 150 pieces, w 0.03-0.08 m, but majority (101) 0.05-0.055 m. Most have one end (or both) broken and surviving lengths are mostly 0.05-0.20 m. The longest complete bar has a mitred end (as have 13 others) and measures l. 0.31 m, w. 0.05 m.
 - ii.** Squares. 3 examples, sides 0.045 m (1) and 0.055 m (2).
 - iii.** Triangles. Right-angle isosceles: 3 examples, sides 0.055 m, 0.085 m, and 0.09 m.
- h.** Egyptian red porphyry (selected examples in fig. E). Few edges were smooth; most were trimmed very roughly, and with the smaller irregular shapes it was often difficult to distinguish accidental breaks from intentional shaping.
- i.** Straight bars. Ca. 63 examples, varying in width from 0.01 m to 0.075m, the commonest being 0.03 m.
 - ii.** Curved bars. 4 examples only, varying in width from 0.02 m to 0.04 m and in estimated diameter from 0.11 m to 0.32 m.
 - iii.** Triangles. Right-angle isosceles: 6 examples, sides 0.04 m to 0.06 m. Scalene: 4 examples, sides 0.28-0.06 m.
 - iv.** Squares. 2, with sides 0.09 m and 0.065 m, respectively.
 - v.** Circles. 2, diams. 0.02 m and 0.025 m, respectively; also 11 fragments, est. diams. 0.10-0.26 m.
 - vi.** Various. About 40 pieces of leaf, petal, or other irregular shapes (see fig. E).
- i.** Alabaster (white).
- i.** Straight bars. 19 examples (w. 0.035-0.13 m), most with one or both edges chamfered away from surface.
 - ii.** Triangle. 1 approximately equilateral, sides 0.065 m; one roughly triangular, with one convex and one concave side (base 0.07 m).
 - iii.** Squares. 2 examples, sides 0.04 m and 0.07 m.
 - iv.** Circle. 1 example, diam. 0.035 m.
- j.** Alabaster (with orange and pink bands).
- i.** Straight bars. 24 examples (w. 0.03-0.095 m).
 - ii.** Curved bar. 1 example, w. 0.02 m, diam. 0.22 m.
 - iii.** Octagon. 1 fragment only, sides 0.04 m.
 - iv.** Circles. 2 fragments, diam. 0.25 m and 0.095 m.
 - v.** Quarter-circle. 1 example, radius 0.05 m.
- k.** Black with white veins (Adapazarı?).
- i.** Straight bars. 7 pieces, w. 0.025-0.08 m.
 - ii.** Curved fragment. Part of circle? Diam. ca. 0.10 m.

Table 1 includes the total quantities of the principal kinds of marble revetment recovered, and for the non-Proconnesian marbles these quantities are expressed in percentages. The table also provides comparative figures for two selected areas.

Table 1. The Principal Kinds of Marble Revetment

	<u>Whole Site</u>			<u>Level 94</u>		<u>Cistern Levels</u>		
<u>Material</u>	<u>Nos.</u>	<u>% Non-Proc.</u>	<u>Nos.</u>	<u>% Non-Proc.</u>	<u>% Whole Site</u>	<u>Nos.</u>	<u>% Non-Proc.</u>	<u>% Whole Site</u>
Proconnesian	35,223	-	932	-	-	767	-	-
<hr/>								
<i>Non-Proconnesian</i>								
Dokimian	2,125	24.26	84 ^a	10.78	3.95	15 ^a	0.88	0.71
Yellow Numidian	1,556	17.76	107	13.73	6.88	630 ^a	36.82	40.49
Green porphyry	1,364	15.57	146	18.74	10.70	447 ^a	26.12	32.77
Verde antico	1,270	14.50	37	4.75	2.91	316 ^a	18.47	24.88
Iasos	575	6.56	26	3.34	4.52	78	4.56	13.56
Red porphyry	421	4.81	51	6.55	12.11	121	7.07	28.74
Alabaster	245	2.80	5	0.64	2.04	14	0.82	5.71
Black with white veins	176	2.01	125 ^a	16.05	71.02	0	-	-
Bilecik	94	1.07	23	2.95	24.46	0	-	-
Other marbles	317 ^b	3.62	37	4.75	11.67	26	1.52	8.20
Slate	618	7.04	138 ^a	17.72	22.33	64	3.74	10.35
Total	8,761		779			1,711		
<hr/>								
<i>Other Material</i>								
Mother of pearl	152 pieces	-	2	-	1.3	63 ^a	-	41.5
Opaque green glass	Ca. 0.65m ²	-	Ca. 0.10m ²	-	0.15	Ca. 0.18m ²	-	0.28
Opaque blue glass	Ca. 1.10m ²	-	Ca. 0.33m ²	-	0.3	Ca. 0.2m ²	-	0.18
Wall Mosaic	126 trays	-	37	-	29.0	22	-	17.0

^aThe reader's attention is drawn particularly to these figures and to associated percentages.

^bThese comprise green-grey sandstone (67), hard dark grey sandstone (Teos?) (38), basalt (35), very hard green stone (Egyptian?) (24), and sixteen miscellaneous groups.

Analysis of Two Areas

TWO AREAS were remarkable for the sheer quantities recovered of various categories of the church's decoration. One was the destruction fill above the crypt (level 94), which presumably contains material from the sanctuary, the other the destruction fill deep in the grand cistern (levels 830*, 831*, 833*, 834*, 997*, 1000*, 1001*, 1005*, 1006*, 1008, 1009*) just outside the church, but thought to contain material from the church's north-western sector. The preceding table of some categories, gives an idea of the richness of the two areas and suggests some respects in which they differ, in samples that were quantitatively roughly similar.

It will be seen that there was remarkably little Dokimian marble from cistern levels (and less than might be expected from level 94), whereas yellow Numidian, green porphyry, *verde antico*, and red porphyry were extremely abundant in the cistern, together outnumbering the Proconnesian pieces and accounting for over 88 percent of the non-Proconnesian fragments. There was no such marked preponderance of these distinctive marbles in level 94, and indeed *verde antico* there was well below average; this level had a much higher proportion, however, of the comparatively rare black marble with white veins (Adapazarı?) and of Bilecik, and the large quantity of slate is evidence for the finer inlay-work. The quantity of mother of pearl recovered from

the cistern-levels is as remarkable as its almost total absence from level 94. In level 94 opaque blue glass predominated over green by about 3 to 1; in the cistern they were more or less equally represented.³

Whereas these fragments of course represent only a part of the original revetment and paving, they do in their differing quantities perhaps provide some idea of the proportions of different marbles used in the original scheme. We have no means of knowing what proportion of the original total has survived, although it may be suggested that the proportion is fairly high as shattered revetment is of only limited use. Pieces of red and green porphyry and yellow Numidian marble may have been more attractive than pieces of other types to those later using the derelict site as a quarry, but pieces of precisely these three marbles tend individually to be distinctly smaller than those of other types, and thus the percentages in the above listing may still give a good idea of relative areas of different marbles in the original decoration.

The average size of fragment is probably of the order of 10 × 10 cm, although Proconnesian fragments tend to be perhaps twice as large. In very crude terms we can thus allow from 50 to 100 fragments to one square metre, which provides another measure to the quantities set out above.

Discussion

ALTHOUGH the designs of the inlaid panels in St. Polyeuktos are beyond recovery, there are clear similarities, both in material and in the shape of individual elements, to panels in S. Vitale at Ravenna and in the Basilica Euphrasiana at Poreč (Parenzo).⁴ However, although there are close similarities too between the S. Vitale panels and those in the Basilica Euphrasiana, there are also differences, one of the more important being that the Basilica Euphrasiana (unlike S. Vitale) clearly incorporates reused pieces, makes up single design-elements with broken fragments, and employs some local materials.⁵

The nature of the relationship between the three sets of panels is not clear. The discovery at Kenchreai of large and elaborate glass-inlay panels of the fourth century, found stacked in the crates in which they had

been transported and thought to have originated in Alexandria, is evidence for long-distance traffic of prefabricated panels.⁶ That the panels for St. Polyeuktos were made in Constantinople (rather than, e.g., Alexandria) is shown both by the fact that specially prepared pieces of identical green and gold glass were used to decorate columns of Proconnesian (i.e., local) marble, and by the general homogeneity of the range of marbles used both in the panels and elsewhere in the building. Whether other panels were dispatched ready-made from Constantinople to Ravenna or whether workmen travelled there perhaps with some materials, is still an open question. In either case, Poreč could have received some of its distinctive elements either direct from Constantinople or, at one remove, via Ravenna.

Chapter Seven

THE MOSAICS

R. M. HARRISON

M. V. GILL

A LARGE QUANTITY of small fragments of wall- and vault-mosaic was recovered, mainly from church destruction fills in the area of the apse and in the grand cistern. Only a small quantity of pavement-mosaic was found, all in the south-eastern sector of the nave. The

two categories will be discussed separately. The figured wall- and vault-mosaic is particularly important; it is almost certainly part of the original sixth-century decoration and thus rare evidence of figured mosaic in pre-Iconoclast Constantinople.

Pavement-Mosaics

APPROXIMATELY one hundred fragments of pavement mosaic were found fallen in a disturbed layer (217) in the south-eastern sector of the nave. Their total area is approximately two square metres, and the largest piece measures 0.47 by 0.52 m (pl. 278).

The majority of pieces consist of black-and-white tesserae only; fourteen have in addition other colours. The principal theme is a black-and-white grid with squares of a single row of black tesserae surrounding a single row of red or green tesserae, and a filling of yellow. On one fragment, either one white cube is misplaced or this is part of another pattern (perhaps a meander); on another, white (three concentric rows), black, and red are laid in a curvilinear pattern.

Tesserae, which average forty-four to the square decimetre, are of grey and white marble (Proconnesian),

black marble with white streaks (Adapazarı?), yellow marble (Numidian or *giallo antico*), a reddish marble, and a green stone. They are set in yellowish mortar (thickness 0.06–0.08 m), which is mixed with fragments of crushed pottery and which, in several cases, has an underlying layer of marble chips, upon which the pavement was evidently laid, still adhering.

There is evidence from several parts of the nave, to north and south of the axial passage, that the floor was underpinned by a thick layer of marble chips (e.g., levels 253*, 262*, 265*, 293, 346*), and there can be no doubt that our fragments are from the nave pavement. It is not known, however, whether the whole of the nave was paved in this fashion; the fact that no pavement-tesserae were found in other parts of the nave suggests that only one sector had mosaic.

Wall- and Vault-Mosaics

CONTEXT

The material recovered ranged from individual tesserae to small areas of mosaic embedded in lumps of plaster up to 15 cm across, and it filled 123 trays. The only piece that could be regarded as being *in situ* was on the lower face of a brick pier which had fallen flat in the atrium, and this was too scrappy to be instructive. The overwhelming majority of finds came from

twelfth- or thirteenth-century contexts (mortary destruction-layer), particularly in the areas of the apse and the grand cistern, but many smaller groups and individual tesserae were naturally found too in Turkish levels. Mosaic was also found in eleventh- and tenth-century contexts in the crypt (56*, 88*, 94), atrium (55*, 848*, 864*, 964*), and narthex (238, 1240*, 1242*, 1272*), in a sixth-century context in the atrium (1463*), and apparently in fifth-century contexts in the

areas of the atrium (1390*, 1467*) and the crypt (168*, 185*).

Fragments from these fifth-century contexts appear to antedate the church and to be evidence for the mosaic decoration of an earlier building on the site. Only level 1463* provides an unequivocal sixth-century context, and this may be of the building period of the church or not long thereafter. Mosaic is absent from seventh-century groups, and only levels 522* and 1220*, in the narthex and north aisle, respectively, yielded tesserae in eighth- or ninth-century contexts. Mosaic becomes more frequent in tenth- and eleventh-century groups and indeed in the eleventh the church may have been, in part at least, closed. The bulk of the mosaic came from the twelfth- to thirteenth-century destruction-layer, indicating that the mosaic was still adhering to the brickwork when the collapse came. This was certainly the case with the one upper-storey pier found lying as it had fallen in the atrium. The site thereafter became a quarry for brick and marble, and the loose mortar and fragmentary pieces of mosaic were virtually all that survived.

PLASTER

Many fragments show two distinct layers:

- the setting bed, where an upper layer of finer plaster with few additives is visible; this varies in thickness, generally between 0.01 m and 0.02 m;
- the lower layer, which is coarser and has impressions of straw or other vegetable matter and particles of crushed pottery.

Several pieces show the edge of a job-area, in a smooth edge to the setting bed (but not to the coarser layer beneath); the frescoed colour of the adjacent surface often extends over all or part of this edge (cf. items 96-99, 103, and 136, in the catalogue below).

PAINT

Before the tesserae were applied, the damp plaster was painted with a frescoed cartoon, which gave a rough indication of the design. It did not always give the full range of colour to be used in the final mosaic: e.g., item 103, where alternate bands of blue-green and purple tesserae are set on a plain red ground; 136, where black paint was used under pale apple-green and adjacent red-brown tesserae, and red paint under gold and adjacent white marble. Often the frescoed colours approximate to the colours of the tesserae, but not always: e.g., white tesserae are commonly set on a black

ground (cf. 135); gold is set on both red and ochre. Tesserae do not always follow the cartoon exactly, e.g., 122, where a row of missing tesserae covered the junction between areas of red and black paint. Sometimes the correct colour was painted on initially; at other times the surface was given a preliminary wash of one colour (often red or ochre), and details were superimposed in a secondary colour, e.g., 130 (red wash with superimposed ochre and black); 129 (red wash covered with black).

Tesserae tend to be closely set, concealing much of the painted plaster. Occasionally the tesserae are more widely spaced, and the paint is left to play a part in the final decoration: e.g., 3-5 (the lips, nostrils, and neck of figures).

The basic colours are red, ochre, and black, but there is a fair range of shades: red (light brick red, dark brick red, red mixed with black), brown, orange, yellow (light ochre, dark ochre, ochre mixed with black), cream, pink, fawn, grey (charcoal grey, blue-grey, green-grey), green (blue-green, yellow-green), unpainted white.

TESSERAE

Size. Tesserae recorded in the catalogue are of average size unless described as small (ca. 3-6 mm) or peculiarly large.

Inclination. Tesserae are all set level with the bedding plane unless described in the catalogue as tilted. Tilted tesserae are always metallic, usually gold with occasionally a few silver intermixed; they may be set on either a red- or an ochre-painted ground.

Colours. These are sometimes difficult to determine. In some cases a surface deposit of black disguises the original colour, particularly with blue, fawn, and cream glass. Sometimes the glass has decayed, the present colour being creamy, grey, or blackish brown, the original colour being doubtful. Again, the upper surface of metallic tesserae is liable to be lost, and, even when the metal leaf is present, deterioration may make it difficult to distinguish silver from gold.

Opaque Glass

Black (also decayed type, apparently brown-black)

Dark blue (slightly bubbly appearance)

Blue (decay often providing a metallic sheen)

Mid-blue (slightly greyish and bubbly appearance)

Cobalt: dark, mid-, and light (rare, in, e.g., levels 1329 and 1387)

Dark turquoise (slightly bubbly)

Turquoise
 Pale turquoise
 Bluish white
 Green-blue (bubbly)
 Blue-green
 Apple green: dark and light
 Yellow-green
 Dark green (bubbly)
 Light green (often decayed)
 Yellow (rare)
 Cream (often decayed or covered with black deposit)
 Purple (usually dark and sometimes difficult to distinguish from black; bubbly)
 Red: dark brick red and light brick red
 Brown (very similar to reds)
 Fawn (often covered with black deposit)

Sometimes tesserae are of mixed colours: e.g., black and blue; red and black; turquoise and pale turquoise, etc.

Metallic on Transparent Glass

Silver on colourless or pale amber
 Gold: on colourless, on pale amber,
 on pale brown, or on olive

Metallic type glass tesserae are sometimes set on their sides or backs, to use the colours of the transparent glass or of their backs (e.g., 64, where reddish brown tesserae are probably the backs of olive cubes). It is not always clear whether some transparent tesserae were originally metallic or were intended to show their natural colours.

Stone

White limestone (often decayed)
 White marble (Proconnesian)
 Grey marble (Proconnesian)
 Dark grey (also marble?)
 Various shades of a marble (Numidian?) from pink to white and yellow
 Black slate
 Red marble (Iasos)

Terracotta

Dark
 Light

SUBJECT-MATTER

The church's mosaic decoration included figures: fragments 3 to 8, with whites, pinks, and reds carefully

modelled in tiny tesserae, are conclusive. Fragment 3 shows the lower part of a face, with neckline, bearded jaw, chin, and mouth; the scale is rather less than life-size. Fragment 4 also shows the lower part of a face, on a similar scale. The background paint plays a considerable part in the design in areas where tesserae were never placed (e.g., the lips of 4). The technique is impressionistic rather than formal, and somewhat hesitant. Fragments 9 to 37 can also probably be attributed to figures.

Apart from one small piece (37) from the northern sector of the atrium, all the figured and possibly figured fragments are from a small area in and around the crypt (levels 50, 84, 87*, 94, 168*, and 181 in KLM/13-15). Seven and a half trays of red-painted plaster, presumably gold, were found in nearby levels 56*, 94, and 165; this was by far the most abundant type in this area of the site (and the biggest concentration of it from the site as a whole). There can be little doubt that this represents a gold background for the figures and that, from its position as found, the mosaic had fallen from the apse.

Of several thousand fragments of mosaic recovered, only thirty-five (nos. 3-37) were attributable to figures, and thirty-four of these come from the area of the apse. Of the rest, a few might be from garments; the overwhelming majority are either plain or have simple designs (circles, triangles, arcade, etc.). Abstract designs clearly predominated overall, and dark blues and greens were the most frequent colours.

CATALOGUE OF SELECTED FRAGMENTS

There follow brief descriptions of 137 fragments, each of which is illustrated by a drawing, carrying the catalogue-number of that fragment (figs. A to G). The drawings, which are at a scale of 1:2, are schematic only. The selection includes all fragments with letters of inscription(s) (1-2), all figured fragments (3-37) and fragments chosen as examples of technique or design.

1. Small black tesserae on black paint; white limestone (on red?). Inscription: parts of letters from two lines, possibly B/TOΠ. From level 1380* (Y-bb/13-15 area) (fig. A, pl. 279).

2. Small black tesserae on black paint; small white limestone on red, which forms a preliminary wash. Inscription: black letters on white, possibly ΨΗΦ in line 1. From level 1237* (narthex sector D) (fig. A, pl. 279).

3. Paint: creamy flesh-coloured ground, with details painted in red and black. Tesserae small: white and pink stone and decayed glass of uncertain colours

(cream, light green, and unknown [greyish]. Part of face. From level 94 (L/14-15) (fig. A, pl. 280)

4. Paint: creamy flesh-coloured ground, with details painted in red and black. Tesserae small: white and pink stone; decayed glass (colour uncertain). Part of face, with lips rendered in paint without tesserae. From level 50 (K/13-14) (fig. A).

5. Paint: creamy flesh-coloured ground, with details painted in red. Tesserae small; white and pink stone; decayed glass (cream and uncertain). Figure (face?). From level 50 (K/13-14) (fig. A).

6. Paint: cream, with some light red. Tesserae small: white and pink stone; decayed glass (greyish). Part of figure (hand?). From level 50 (K/13-14) (fig. A).

7. Paint: light red. Tesserae small: white and pink stone, decayed stone (greyish). Part of figure (hand?). From level 50 (K/13-14) (fig. A).

8. Paint: light red. Tesserae small: white stone; decayed glass (creamish). Part of figure (hand?). Impressions of two large tesserae on right. From level 50 (K/13-14) (fig. A).

9. Paint: flesh-coloured, with details in red. Tesserae small: white stone and decayed glass (perhaps fawn); two gold triangles and impressions of other tesserae tilted in slightly different directions. Part of figure. From level 94 (L/14-15) (fig. A).

10. Paint: creamy flesh, with red-black line. Tesserae small; white stone, creamish and decayed (greyish). Part of figure? From level 50 (K/13-14) (fig. A).

11. Paint: light red. Tesserae small: white and pink stone; glass cream and decayed (greyish). From level 94 (L/14-15) (fig. A).

12. Paint: light red. Tesserae small: white and pink stone; cream glass. From level 50 (K/13-14) (fig. A).

13. Paint: light red. Tesserae small: white and pink stone; glass cream and decayed (greyish). From level 50 (K/13-14) (fig. A).

14. Paint: light red. Tesserae small: white and pink stone; glass decayed (blue?), colourless (yellowish), and one tilted gold. From level 50 (K/13-14) (fig. A).

15-22. Paint: thirty-three ochre and black, remainder light red. Small tesserae: white and pink stone; amber, black, cream, and decayed glass. From level 50 (K/13-14) (fig. B).

23-25. Paint: flesh-coloured (creamy red), black beneath green tesserae. Tesserae small: very pale pink (forty-one) and white stone; pale olive (transparent), blue-green, and decayed glass. From level 50 (K/13-14) (fig. B).

26. Small tesserae: white and pink stone on (?) unpainted; dark transparent olive and black on black.

Two right-hand tesserae and impressions tilted, and therefore originally gold? From level 94 (L/14-15) (fig. B).

27. Paint: flesh-coloured beneath white and pink stone; black beneath decayed glass (fawn [?] and uncertain); one gold, tilted tessera and impressions of larger tilted tesserae (i.e., gold) on red ground. From level 94 (L/14-15) (fig. B).

28. Black paint beneath larger black(?) tesserae (impression of one tilted); small white and pink (dark and pale) stone tesserae. From level 84 (LM/12-13) (fig. B).

29. Small pink stone tesserae on light red paint. From level 84 (LM/12-13) (fig. B).

30. Small tesserae: pink, pale pink, and white stone. From level 84 (LM/12-13) (fig. B).

31. Small tesserae (except black). Dark pink and pink stone on flesh-coloured paint; decayed glass on black. From level 84 (LM/12-13) (fig. B).

32. Trace of greyish paint where tessera missing. Small tesserae: white, pink, and pale pink stone; glass decayed (colour uncertain). From level 99 (L/15-16) (fig. B).

33. Light red paint. Small tesserae: white stone and decayed (cream?) glass. From level 87* (L/13-14) (fig. B).

34. Paint: dark red, with black. Tesserae normal and small, widely spaced: white and pink stone; white marble; transparent amber, transparent brown, and decayed glass (colour unknown). From level 168* (M/14) (fig. B).

35. Paint: reddish black, with wedge of reddish ochre. Tesserae normal and small, widely spaced: pink and white stone; decayed glass (colour uncertain) and transparent (brown, amber, and pale bluish green) glass. From level 181 (M/15) (fig. B).














36. Paint: flesh-coloured, dark red, and black. Tesserae: pink stone; blue-green and decayed glass. Provenance unrecorded (fig. B).

37. Paint: flesh-coloured beneath pink stone; black under purple and black glass. Tesserae small: also white stone and brown, fawn, blue-green, and decayed (colour uncertain) glass. Part of face (eye and brow?). From level 1015* (X/16-17) (fig. B).

38. Gold tesserae (pale yellow glass) on ochre paint; mid-blue on black paint; white limestone on unpainted circle (0.05 m diam.). From level 94 (L/14-15) (fig. B).

39. White limestone on unpainted (?), odd patch of black visible) circle (ca. 0.05 m diam.); mid-blue on black paint. From level 94 (L/14-15) (fig. B).

40. Whole fragment initially frescoed in black. Mid-

KEY		Terracotta		Gold/Yellow
		Red		Dark Blue
		Brown		Mid Blue/Turquoise
		Fawn		Red & Black striped
		Decayed-colour uncertain		Purple
		White		Green
		Black		

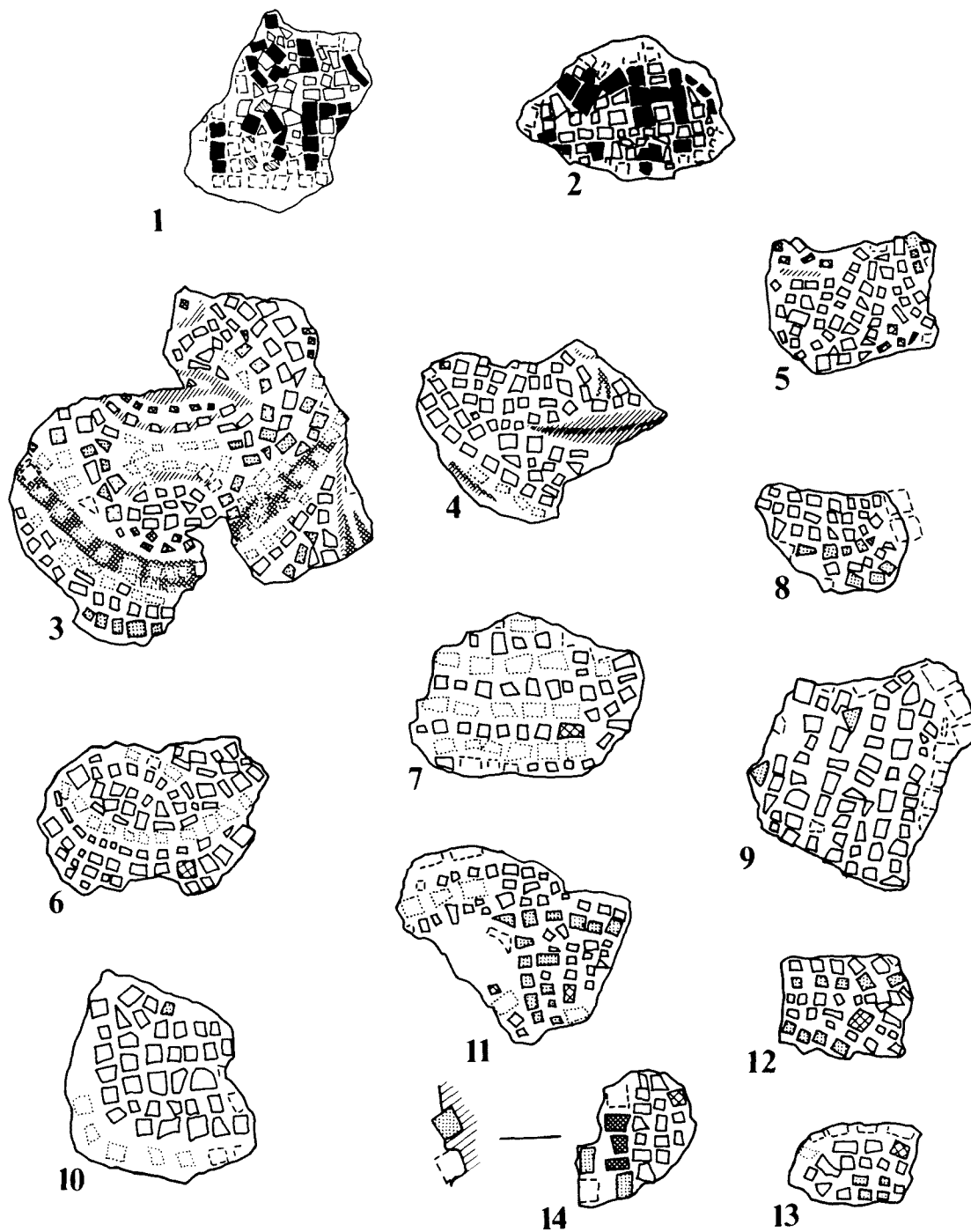


FIGURE A. Mosaic Fragments 1-14 (scale approximately 1:2)

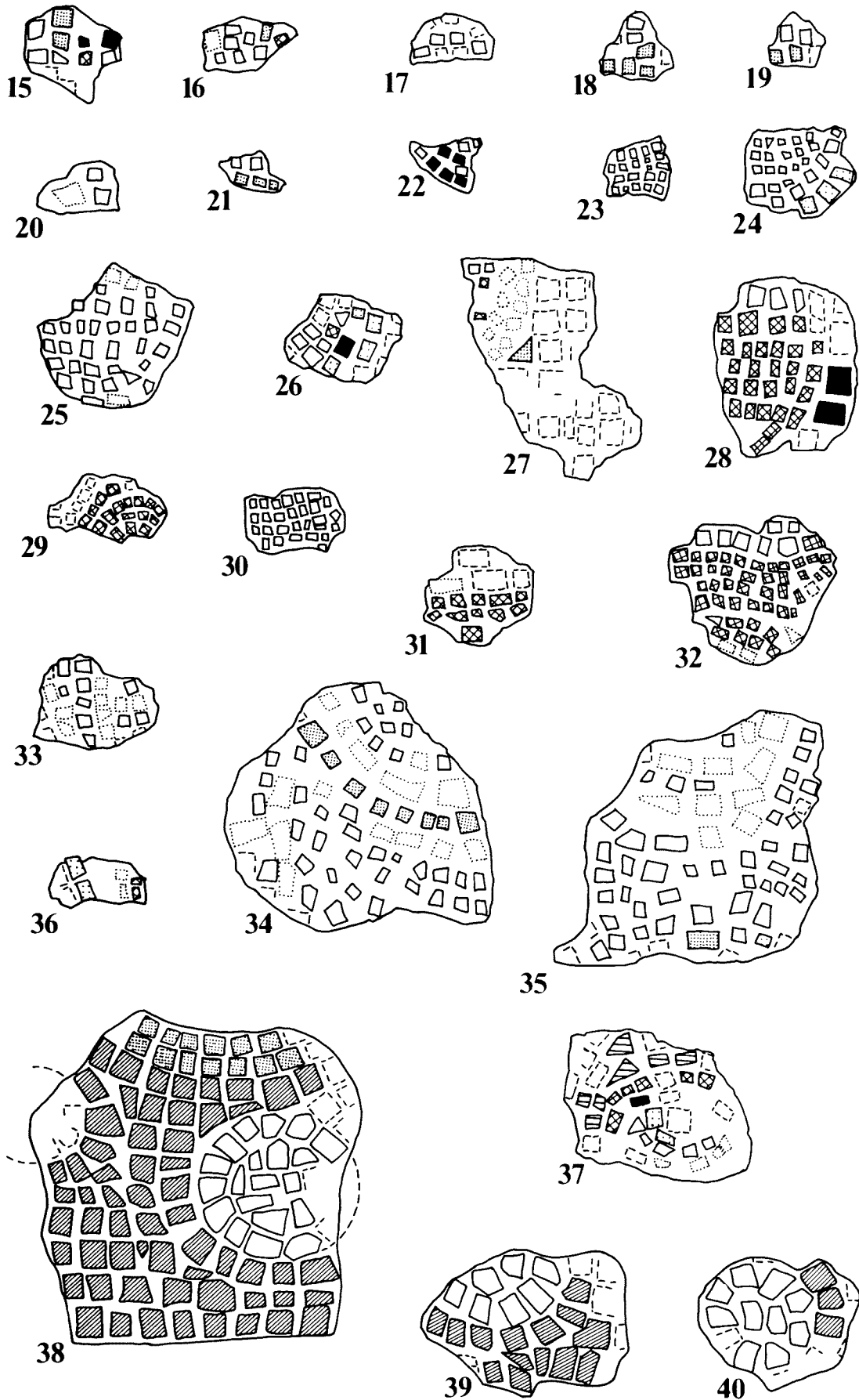


FIGURE B. Mosaic Fragments 15-40 (scale approximately 1:2)

blue; white limestone circle (ca. 0.04 m diam.). One cube of transparent glass (metallic type) visible in side of fragment, below surface of plaster. Provenance unrecorded (fig. B).

41. White marble circle (0.028 m diam.) on unpainted (or black? cf. following fragment) ground; dark blue on black; band of ochre with impressions of missing tesserae; these were probably of gold, since impressions are slightly smaller and have cleaner-cut outlines than those of the blue. From level 1001* (X/12-14) (fig. C, pl. 281).

42. White marble circle (diam. ca. 0.03 m) and dark blue on black. From level 1001* (X/12-14) (fig. C, pl. 281).

43. White marble circle (diam. ca. 0.028 m) and blue/dark blue on black. Provenance unrecorded (fig. C, pl. 281).

44. Red-painted ground along top, spreading into black register. Black on black; white marble on unpainted (?); dark blue on black; white marble circle (diam. ca. 0.028 m) on black. From level 1001* (X/12-14) (fig. C).

45. Red-painted ground, with black paint under the black and dark blue tesserae and part of the white marble; white marble and limestone; two cubes of greyish marble; tilted gold background. From level 88* (L/13-14) (fig. C).

46. Terracotta tesserae on red painted ground; decayed white limestone circle (diam. 0.03 m). From level 1001* (X/12-14) (fig. C, pl. 281).

47. Red glass tesserae on red-brown; white marble circle (diam. 0.025 m). From level 1005* (X/15) (fig. C, pl. 281).

48. Black-painted ground. Black; dark blue glass (decayed to greyish colour); terracotta. From level 169* (M/14) (fig. C).

49. White limestone on unpainted; dark transparent olive on black; purple(?) on black. Ochre painted bands, with one gold (on olive) tessera. From level 84 (LM/12-13) (fig. C).

50. Ochre-painted ground, without tesserae; purple (?) (decayed glass) on black; white limestone on unpainted. Provenance unrecorded (fig. C).

51. Decayed white limestone on unpainted ground; metallic cubes (amber and transparent glass), some certainly gold, on ochre; black (?) on black. From level 94 (L/14-15) (fig. C).

52. Red stone (Iasos?) on black; yellowish stone on black/red; small olive, amber, and pale green (almost colourless) glass cubes of type used for gold, on red paint; red-and-black-striped glass, dark green, and

black, on black paint. Lower row of yellowish stone slightly pinker in colour. Glass decayed, colour uncertain. From level 94 (L/14-15) (fig. C).

53. White limestone on unpainted ground; decayed glass (colour unknown) on black; small metallic-type cubes on ochre. Provenance unrecorded (fig. C).

54. Red and brown glass, on red; impressions of tilted tesserae (gold background?). From level 94 (L/14-15) (fig. C).

55. Plaster first given an overall wash of red, then ochre paint in inner circle, black under the black (possibly very dark blue) tesserae, green under the yellow-green and apple green tesserae. From level 169* (M/14) (fig. C).

56. Turquoise on black. From level 94 (L/14-15) (fig. C).

57. Ochre paint, except small patch (black) below; one tessera decayed glass of opaque type, remainder small transparent olive green or with metal surviving (some gold, some possibly silver). Provenance unrecorded (fig. C).

58. Paint: ochre and black (with which the row of black/dark blue tesserae does not quite coincide); unpainted beneath the white limestone. From level 94 (L/14-15) (fig. D).

59. Paint: ochre and black. Tesserae: white limestone, decayed and with surface deposit (therefore difficult to distinguish individual tesserae in centre of angle); black (or possibly dark blue) outline. From level 50 (K/13-14) (fig. D).

60. Paint: ochre with black lines. Tesserae: white limestone and black (brownish black?). Two limestone tesserae 0.02 m beneath the surface of the mosaic are either accidentally incorporated in the plaster or evidence for an earlier decoration. From level 84 (LM/12-13) (fig. D).

61. Paint: black beneath black (?) glass and missing (limestone?) tessera; ochre. White limestone tesserae filling angle are covered by surface deposit and lump of white mortar (evidence of later decoration?). Provenance unrecorded (fig. D).

62. Paint: ochre with black lines. Tesserae: white limestone, black. From level 97 (L/15-16) (fig. D).

63. Gold tesserae (olive glass with some gold surviving) on ochre, black stone (slate?) on black, white limestone on unpainted. From level 94 (L/14-15) (fig. D).

64. Paint: background of ochre paint with impressions of tilted tesserae (one olive with gold *in situ*; design in red paint, in parts covering ochre. Tesserae: white marble and glass (dark) of indeterminate colour. From level 56* (K/14-15) (fig. D).

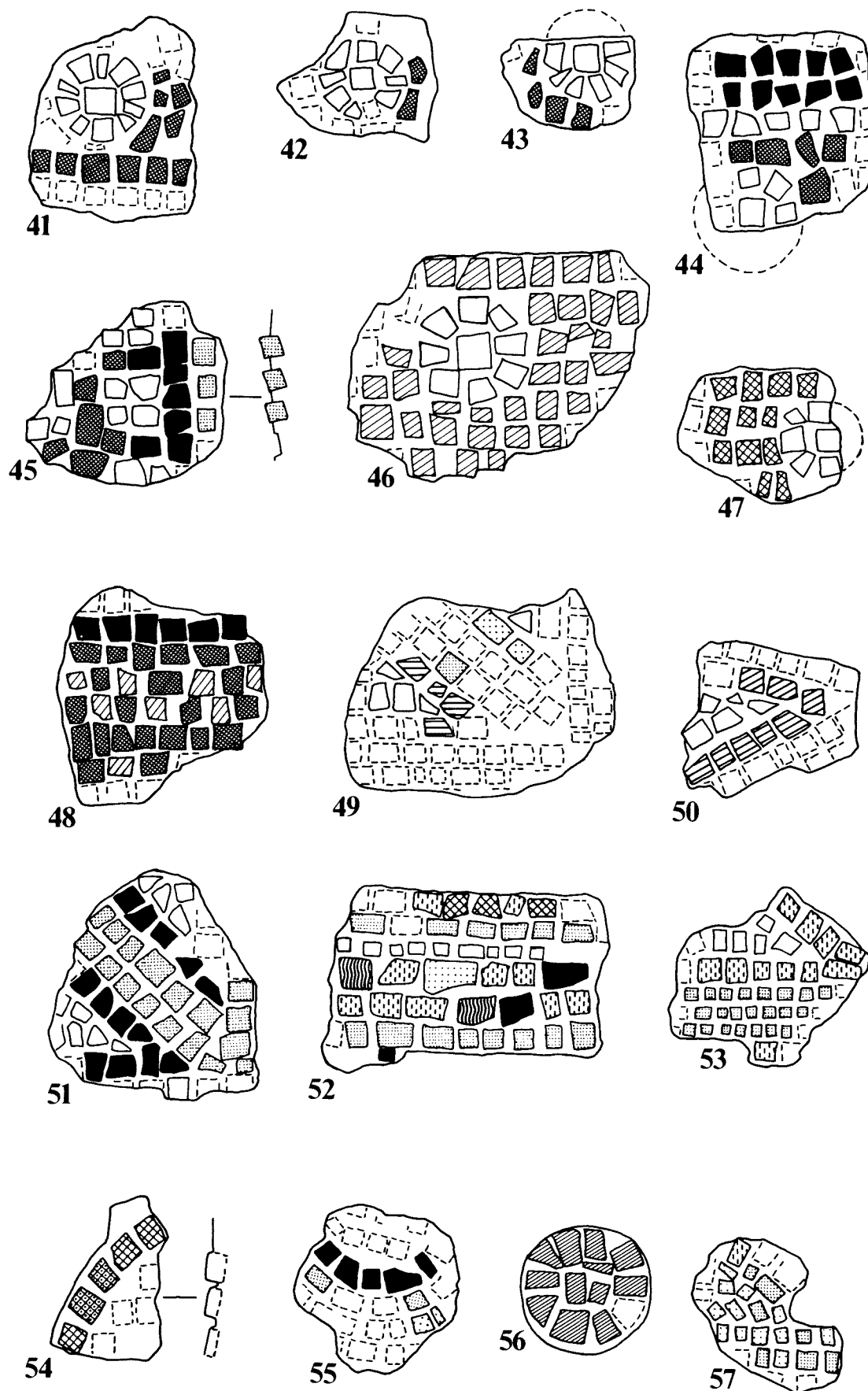


FIGURE C. Mosaic Fragments 41-57 (scale approximately 1:2)

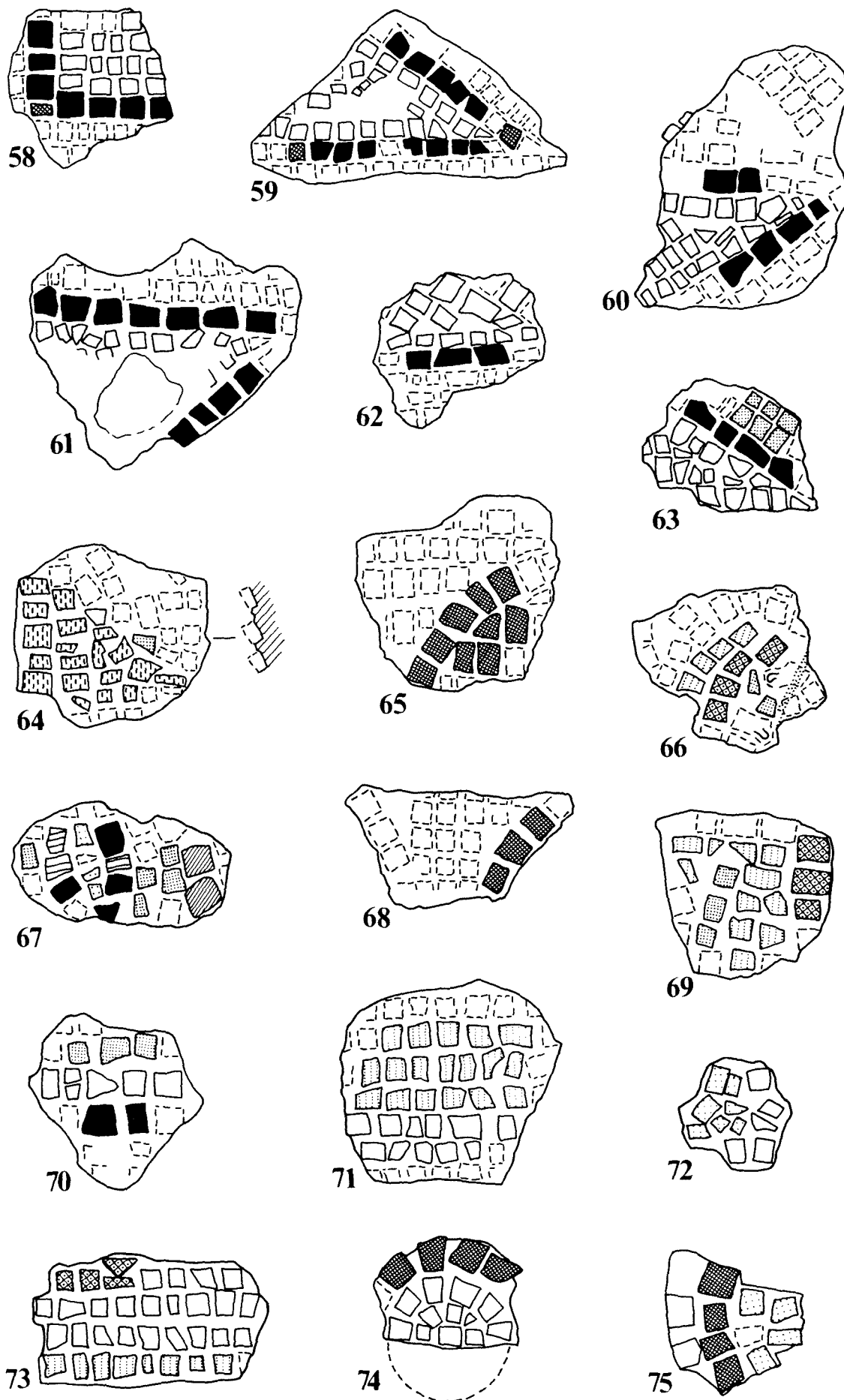


FIGURE D. Mosaic Fragments 58-75 (scale approximately 1:2)

65. Paint: ochre with impressions of tilted tesserae, and black beneath dark blue tesserae. Design: arc of dark blue circle on gold ground. From level 94 (L/14-15) (fig. D).

66. Paint: ochre, with narrow strip of black that does not correspond to a row of tesserae. Tesserae: fawn, gold, and amber (probably originally gold); reddish brown tesserae of sandy appearance, which are the backs of metallic type (probably olive). Two impressions of tesserae are shallower and with a rounded corner; these were probably corner fragments of green or blue inlay glass with mark of tool. Design: a gold spiral? From level 56* (K/14-15) (fig. D).

67. Paint: precise areas of colour not clear; appears to be an all over wash of ochre with light red beneath (visible where ochre has flaked or worn away). Tesserae: tilted gold (olive glass), dark purple, black (or possibly dark purple), dark and light apple green, darkish mid-blue. From level 56* (K/14-15) (fig. D).

68. Paint: ochre (impressions tilted at top of fragment, less obviously so towards bottom); black beneath dark blue tesserae. From level 87* (L/13-14) (fig. D).

69. Paint: ochre beneath tilted gold (olive glass) and brownish red beneath shades of fawn. From level 94 (L/14-15) (fig. D).

70. Paint: bands of ochre, unpainted, and black, beneath tesserae of gold, white marble, and (?) black. From level 84 (LM/12-13) (fig. D).

71. Paint: all over wash of red, with wide black band beneath fawn (darkish) tesserae. Tesserae: white marble; missing top row tilted (gold?). From level 56* (K/14-15) (fig. D).

72. White limestone on unpainted ground; dark and light apple green and blue-green on black ground. From level 94 (L/14-15) (fig. D).

73. Paint: brownish red. Tesserae: brown, cream, fawn (darkish). From level 56* (K/14-15) (fig. D).

74. Paint: black beneath dark blue (uncertain how far black extends beneath white limestone as centre of circle is obscured by surface deposit). White circle (diam. 0.04 m). From level 88* (L/13-14) (fig. D).

75. Paint: green beneath blue-green tesserae, black beneath dark blue (?), and white marble on unpainted. From level 94 (L/14-15) (fig. D).

76. Paint: red. Tesserae: pale pink stone; cream and dark (brownish black?), widely spaced. From level 99 (L/15-16) (fig. E).

77. Paint: all over red, with black showing where tesserae missing and patchily between existing tesserae. Tesserae: turquoise and pale turquoise, and two of un-

determined colour (cream?). From level 94 (L/14-15) (fig. E).

78. Paint: black. Tesserae: mid-blue, a few dark. From level 165 (M/14) (fig. E).

79. Paint: a little black visible on right. Tesserae: gold, metallic (probably gold and silver), dark red, and decayed glass (dark, probably black). From level 87* (L/13-14) (fig. E).

80. Paint: black (which perhaps extends beneath decayed white limestone tesserae), and ochre beneath gold. Tesserae: also two olive and one amber (originally gold?) and two decayed (at present cream). From level 94 (L/14-15) (fig. E).

81. Paint: black beneath dark blue; traces of ochre beneath white limestone tesserae. From level 94 (L/14-15) (fig. E).

82. White limestone tesserae. From level 165 (M/14) (fig. E).

83. Paint: all over red, with black covering much of right and top. Tesserae: one tilted gold; decayed glass (some cream, some greyish). From level 94 (L/14-15) (fig. E).

84. Paint: light red. Tesserae: light red, pale brown (originally gold?) tilted, blue-green, impressions of missing tilted (gold) tesserae. From level 50 (K/13-14) (fig. E).

85. Paint: red with black. Tesserae: dark red, dark blue, and impressions of tilted tesserae. From level 165 (M/14) (fig. E).

86. Paint: red with black. Tesserae: white limestone (average size) in a grid of small decayed glass tesserae (present colour pale grey). From level 94 (L/14-15) (fig. E).

87. Paint: band of ochre between narrow lines of black, remainder unpainted. Tesserae: white limestone and marble; blue and gold. Provenance unrecorded (fig. E).

88. Paint: ochre beneath gold tesserae, black beneath black (possibly dark blue), and pale grey beneath limestone. From level 94 (L/14-15) (fig. E).

89. Paint: ochre beneath gold, black beneath black and very dark grey stone (slate?); unpainted beneath white limestone. Provenance unrecorded (fig. E).

90. Paint: ochre beneath gold, black beneath blue and (?) black, unpainted beneath white limestone. Olive green tessera may have been gold, and one blue tessera apparently misplaced in band of gold. From level 181 (M/15-16) (fig. E).

91. Paint: bands of ochre and black, with impressions of missing tesserae; unpainted beneath white limestone. From level 94 (L/14-15) (fig. E).

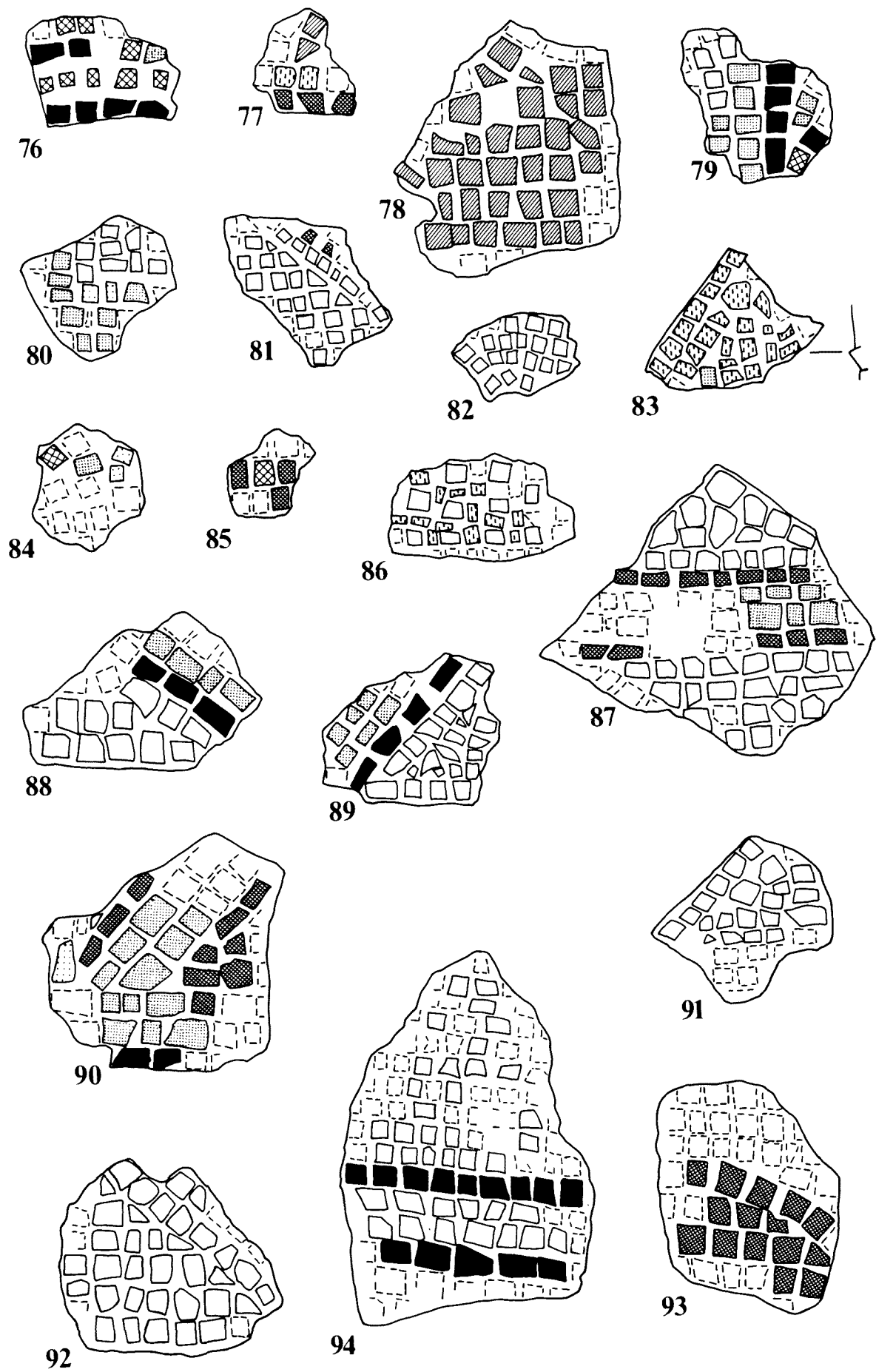


FIGURE E. Mosaic Fragments 79-94 (scale approximately 1:2)

92. White limestone and marble tesserae. From level 181 (M/15-16) (fig. E).

93. Paint: ochre with impressions of tilted tesserae, black beneath dark blue. Design: arc of blue circle (diam. ca. 0.135 m) on gold ground. Perhaps adjacent to no. 65, but no join. From level 94 (L/14-15) (fig. E).

94. Paint: ochre at bottom where tesserae (probably gold) all missing and beneath rows of white limestone between the bands of black; black beneath black tesserae; unpainted beneath upper rows of white limestone (much decayed). Provenance unrecorded (fig. E).

95. Tesserae: blue, decayed (creamish); dark apple green, on green paint. Provenance unrecorded (fig. F).

96. Paint: dark red. Tesserae: red, gold, and probable gold. Orientation of the fragment uncertain. One side shows edge of mosaic job-area: the bedding plaster (thickness 0.015 m) has a smooth edge with red paint extending 0.008 m over it; the lower plaster layer, which is coarser, with crushed pottery, etc., has a broken edge. From level 181 (M/15-16) (fig. F).

97. Paint: dark red all over, with black except beneath gold tesserae. Orientation uncertain. Edge of job-area visible at bottom, where red paint overruns edge almost to base of bedding plaster; edge less smooth than 94. From level 181 (M/15) (fig. F).

98. Paint: all over light red, with black at top, and band of ochre beneath tilted gold tesserae. Edge of job-area rough. From level 1005* (X/15).

100. Two rows of gold tesserae (tilted), one of white marble. From level 1151* (From Z/18-aa/17-18 area) (fig. F).

101. Pattern of small tesserae. Black-painted setting bed, black. From level 1151* (Z/18-aa/17-18 area) (fig. F).

102. Dark blue with two rows of gold on grey and ochre. From level 1038 (XY/16-17) (fig. F).

103. Alternating bands of blue-green and purple tesserae on red, and red-painted edge on several sides. From level 1038 (XY/16-17) (fig. F).

104-107. Black on black and white limestone on unpainted (sometimes white tesserae seem to have been set on black- or grey-painted bed). Single curving row of black tesserae forming simple arcade pattern. From level 1015* (fig. F).

108. Yellow-green next to blue-green, both apparently on grey. From level 1015* (X/16-17) (fig. F).

109. Pale turquoise, dark blue, yellow-green, purple tesserae, and impressions grey- and green-painted. From level 1015* (X/16-17) (fig. F).

110. Dark blue on black paint; light apple green and blue-green on grey-green paint. From level 1015* (X/16-17) (fig. F).

111. Turquoise, dark turquoise, black, black- and ochre-painted. From level 1015* (fig. F).

112. White limestone, fawn, purple, and red-brown painted. From level 1015* (fig. G).

113. Dark blue, gold, and black. From level 1015* (X/16-17) (fig. G).

114-115. White limestone and red on grey. From level 1329* (Y-bb/13-15 area) (fig. G).

116. Small tesserae: mid-blue on grey and brownish black. From level 1329* (Y-bb/13-15 area) (fig. G).

117. Pale blue and (?) transparent and (?) grey; band of reddish paint. From level 1329* (Y-bb/13-15 area) (fig. G).

118. Turquoise, dark blue on black; light red on pink paint. From level 1149 (Z/18-aa/17-18 area) (fig. G).

119. Grey paint. White marble on unpainted band. From level 958* (W/18-19) (fig. G).

120. Paint: orange, fawny brown, and cream. Tesserae: blue-green. Part of plant? From level 958* (W/18-19) (fig. G).

121. Dark red paint with patch of black. From level 1336* (Z/13-14) (fig. G).

122. Red paint with band of black. From level 1336* (Z/13-14) (fig. G).

123. Bands of ochre, black (beneath dark blue [?] tesserae), and red paint. From level 1336* (Z/13-14) (fig. G).

124. Red tesserae on dark red paint; metallic (gold?) tesserae on thin wash of ochre over red. From level 1336* (Z/13-14) (fig. G).

125. Black paint with border of blackish ochre. From level 1336* (Z/13-14) (fig. G).

126. Black paint with band of blackish ochre; row of black tesserae. From level 1336* (Z/13-14) (fig. G).

127. Black paint beneath white limestone and black. From level 1336* (Z/13-14) (fig. G).

128. White limestone and red, on red paint. From level 1336* (Z/13-14) (fig. G).

129. Paint: all over red, with ochre band at bottom and impressions of tilted tesserae; and black beneath white marble tesserae. From level 974* (WX/18-19) (fig. G).

130. Paint: red covered with black. Tesserae: white marble, black, and dark blue. From level 974* (WX/18-19) (fig. G).

131. Paint: black with two patches of ochre. Tesserae: dark blue, and decayed (creamish). From level 974* (WX/18-19) (fig. G).

132-134. Plaster fragments: black paint and greyish ochre; impressions mostly in rows but showing curved lines, or lines at an angle to the rest. From level 1131* (aa/17-18) (fig. G).

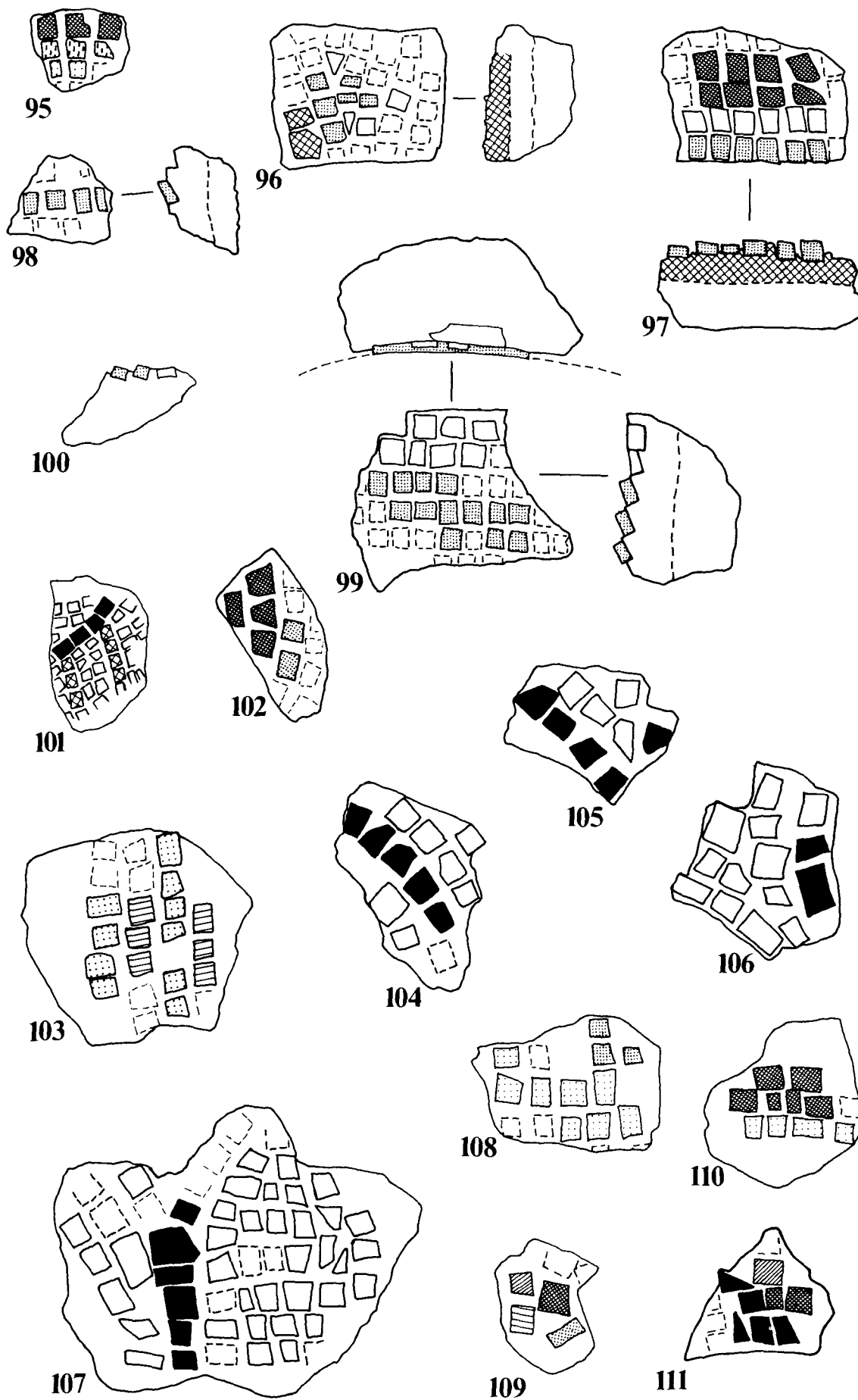


FIGURE F. Mosaic Fragments 95-111 (scale approximately 1:2)

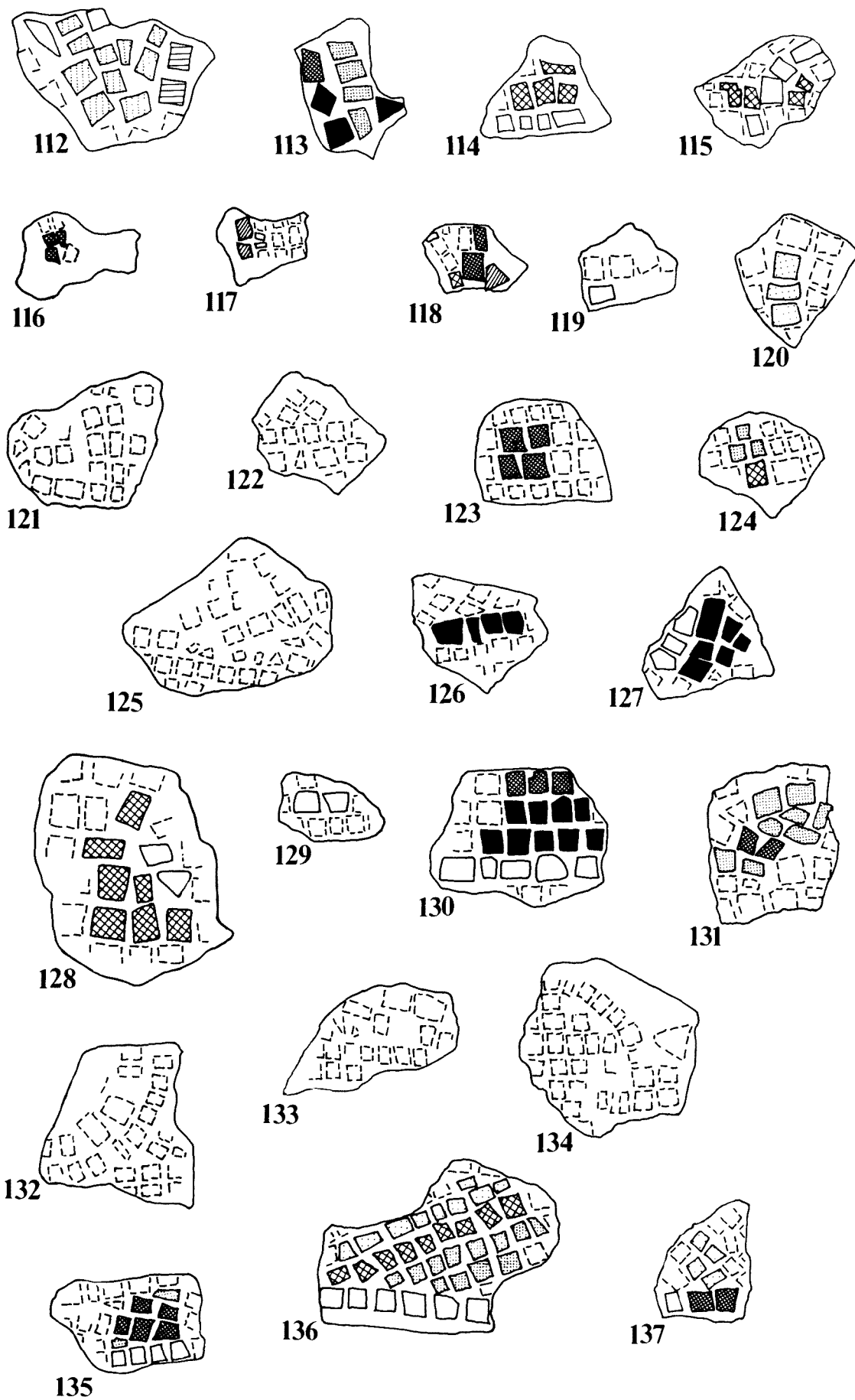


FIGURE G. Mosaic Fragments 112-137 (scale approximately 1:2)

THE CATALOGUES

132. Reddish and black circle (diam. 0.06 m) on ochre.

133. Ochre and black (fig. G).

134. Ochre circle (diam. 0.085 m) with touches of black (fig. G).

135. Black paint, with diagonal band of dark red beneath terracotta tessera. Tesserae: also white marble, pale turquoise, and decayed amber transparent. From level 1131* (aa/17-18) (fig. G).

136. Paint: red beneath white marble and gold tes-

serae; black beneath red-brown and pale apple green. Lower edge shows edge of job area, smooth but not painted. Bedding plaster ca. 0.01 m thick, yellower than coarser layer beneath, which has impressions of straw and crushed pottery. From level 1131* (aa/17-18) (fig. G).

137. Black paint beneath dark blue, pale apple green, and white limestone tesserae. From level 1131*/aa/17-18) (fig. G).

Chapter Eight

PAINTED PLASTER

R. M. HARRISON

M. V. GILL

PAINTED plaster was recovered, in scrappy condition, from various parts of the site. Of the groups and individual pieces listed below, items 7-10, and 14, 16, and 17 are from Byzantine contexts; item 1, a large group found as fallen face down on the floor of the northern part of the crypt, is probably Byzantine too. It has not proved possible to recognize Turkish plaster by differences in technique; the fairly large groups described below as items 5 and 6 are from Turkish contexts, but are not necessarily Turkish. Patterns were difficult, or impossible, to discern, and the problem was complicated by superimposed layers of paint, in varying states of preservation. The material is here surveyed by provenance and illustrated by schematic drawings.

1. LEVELS 50 (K/13-14) AND 94 (L/14-15) (fig. A, 1-14)

a. Three fragments in 50: two pink, one yellow and blue.

b. Ca. 150 fragments in 94, varying in size from 0.02 x 0.03 m (and smaller) to 0.12 x 0.9 m; plaster coarse (thickness up to 0.075 m).

There are several superimposed layers of paint: on many pieces three layers were discernible, on a few up to five. Correlation of layers is therefore difficult. On some pieces, the lowest colour, blue or black, has penetrated several millimetres into coarser ground. The latest layer appears to have been a plain undecorated wash of coarse white.

Colours: blue, greenish blue, green, mauve, black, red, pink, brown, grey, white, yellow, cream. Some colours are in several shades, but sometimes, because of fading, fragments originally of the same shade appear different. It is occasionally difficult to distinguish between blue and black, and on several fragments no colour was clearly discernible.

Patterns: few were recognizable, because the smaller fragments are insufficient to give an impression of the

design, whereas the larger fragments tend to be confused because layers of paint have flaked away to different levels.

Batch a: Seven small fragments with patterns; eight larger fragments, mostly plain, but perhaps belonging to the same scheme:

Layer 3 (uppermost) zigzag (red, green, yellow)
patterns on white ground

Layer 2 blue

Layer 1 black

The distinction between layers 2 and 1 is not always evident, especially on larger fragments.

Batch b: Twenty-seven fragments (twenty-four with pale mauve):

Layer 5 (uppermost) white

Layer 4 yellow and red

Layer 3 pale mauve

Layer 2 blue, yellow, and (?) red

Layer 1 black

Only one fragment shows layer 5, five fragments layer 4; layer 1 is rarely in evidence.

Batch c: Seven fragments with pale greenish blue:

Layer 5 (uppermost) white

Layer 4 yellow

Layer 3 greenish blue with brown (red?) decoration

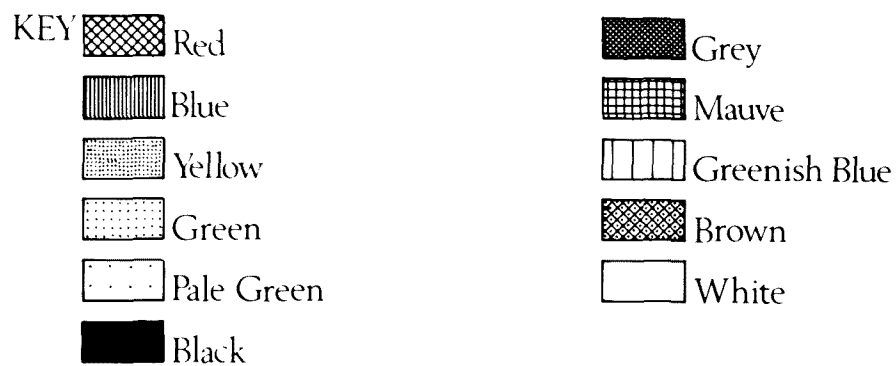
Layer 2 red, blue

Layer 1 black

Other fragments (ca. sixteen) in this group have traces of bright powdery yellow and brown, but no design is distinguishable.

2. LEVEL 165 (M/14)

One fragment (0.125 x 0.095 x 0.075 m thick) (fig. B, 15). On each side at the back the triangular wedge



Group I

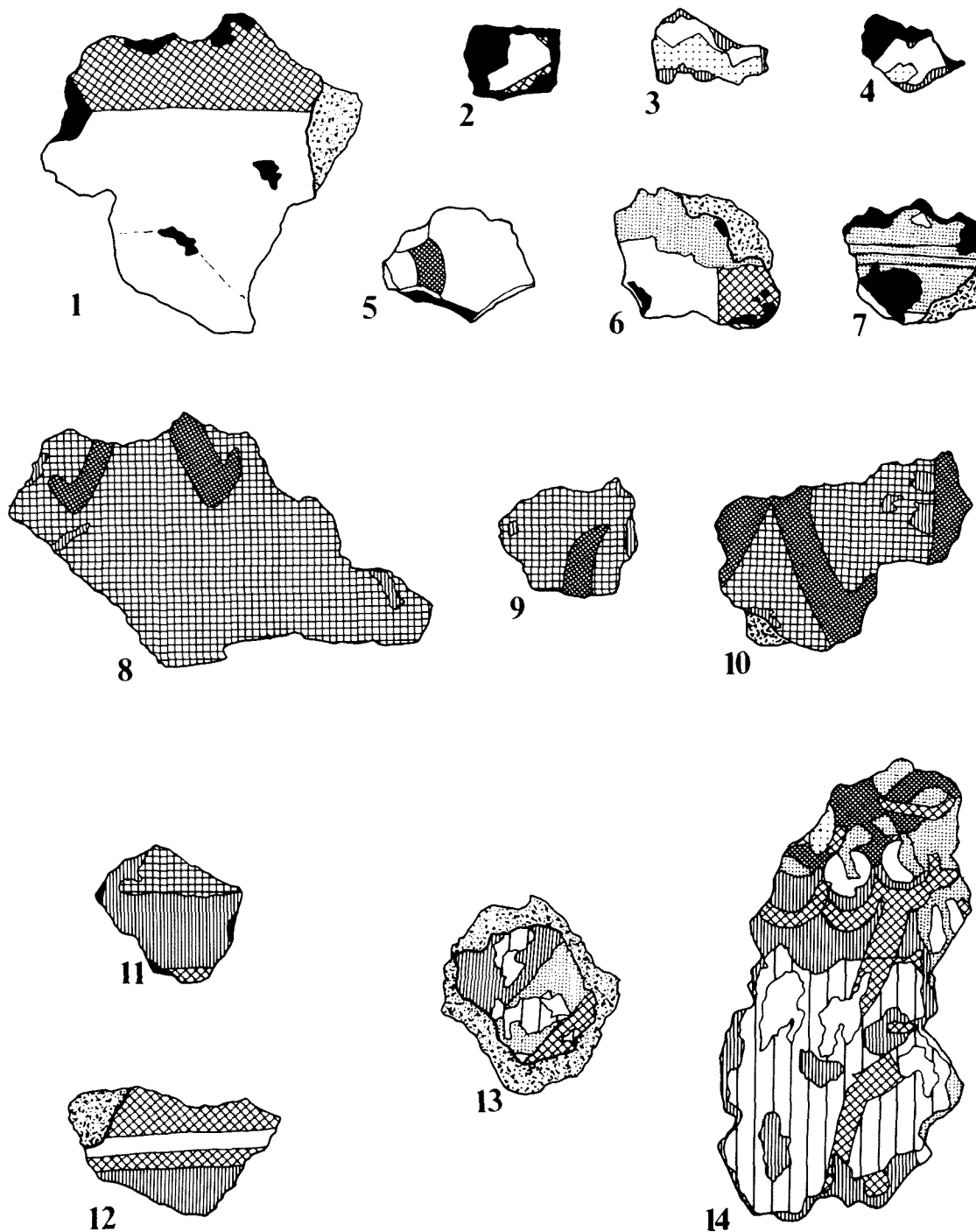


FIGURE A. Plaster Fragments from Group 1 (scale approximately 1:2)

of plaster has the rough impression of masonry. There is a definite eyelike design with the following colours: grey, dark green, greenish white, pale green, white, brownish.

3. LEVEL 275 (P/12)

Three fragments of coarse pinkish plaster with remains of chopped straw and crushed pottery, on which three layers of plaster are distinguishable:

- | | |
|---------------------------|---|
| Layer 1
(bottom layer) | layer of plaster 0.001 m thick, laid on top of coarse pink.
Fragment (a) plain white
(b) small touch of red on the white (fig. B, 16)
(c) completely painted with straight division between areas of black and pink (fig. B, 17) |
| Layer 2 | (only evident on fragment c above) yellow, with second and possibly third paler layer on top, |
| Layer 3 | alternate layers of blue and white.
Fragment (a) blue (below), white (above)
Fragment (b) white (bluish), blue
Fragment (c) blue-white-blue-white |

4. LEVEL 356 (Q/21-22)

Two fragments:

- a.** Coarse pink plaster with crushed pottery (0.04 x 0.06 m); layer of finer white (thickness 0.003-4 m) with remains of chopped straw (fig. B, 18). Black, narrow white stripe painted on black.
- b.** As above, but 0.06 x 0.055 m and with green, yellow, and grey stripes (fig. B, 19).

5. LEVEL 415 (TURKISH CELLAR AGAINST CHURCH'S NORTH WALL)

- a.** Forty-eight fragments of coarse white plaster, the majority ca. 0.01 m thick and the largest 0.065 x 0.05 m; three pieces have brownish orange paint and the remains of white overpainting.

- b.** Ca. forty fragments of coarse white plaster 0.007-0.02 m thick, with finer surface than a; the largest is 0.04 x 0.05 m, black on white plaster, with incised outline. Four fragments have brownish orange paint.

- c.** Eighteen fragments of moulded plaster to make a total length of ca. 0.65 m. Examples are:

- i.** Fragment 0.083 x 0.045 x 0.03 m thick, with geometric pattern (fig. C, 46)
- ii.** Fragment 0.022 x 0.036 m thick (fig. C, 47).

6. LEVEL 492 (R/18)

Forty-nine fragments (average length 0.045 m) of coarse white plaster, as follows (fig. B, 20-25):

- a.** Two yellow, one yellow and red, and two unpainted fragments with concave surfaces (from wall-corners).

- b.** Eight moulded fragments: four (joining) have moulding as a ridge between two panels; four have an edge on one side of moulding, panel on the other.

- c.** Flat fragments 0.006-0.012 m thick (and thicker). The colours from this level are as follows:

Yellow plain fragments (seventeen); with red (two); with yellowish pink (three); with red stripe and white (one).

Red orange-red with yellow (two); with yellowish pink (two); with white (six); with black (one); with white and yellow (one); with white and yellowish pink (one); with black, grey, and pink curving stripes (one); on moulded fragments, with black and yellow.

White plain (six); with red (five); with red stripe and yellow (one); with red stripe and yellowish pink (one); on mouldings (eight).

Pink yellowish pink with red (two); with yellow (three); with red stripe and white (one); with red, black, and grey curving stripes.

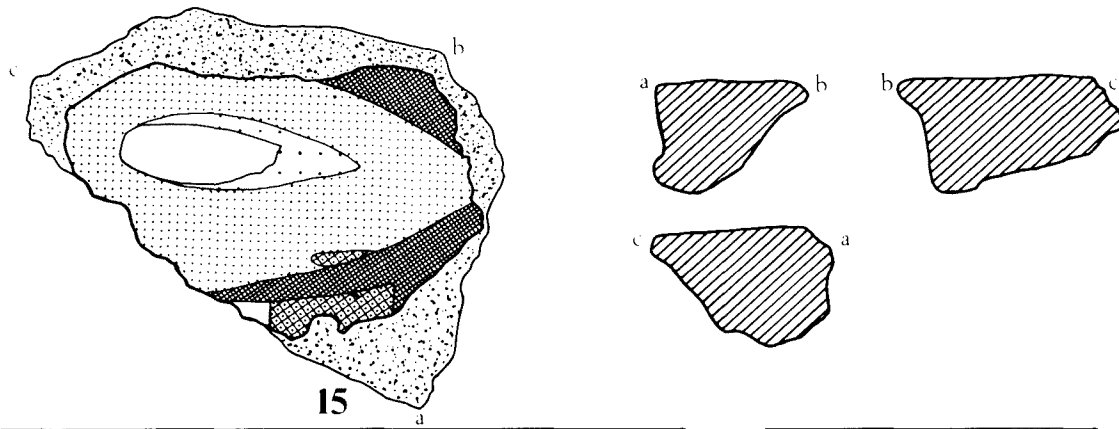
Black with red (one); with red, grey, and pink curving stripes; for pattern on moulded fragments (four).

Grey with red, black, and pink curving stripes (one).

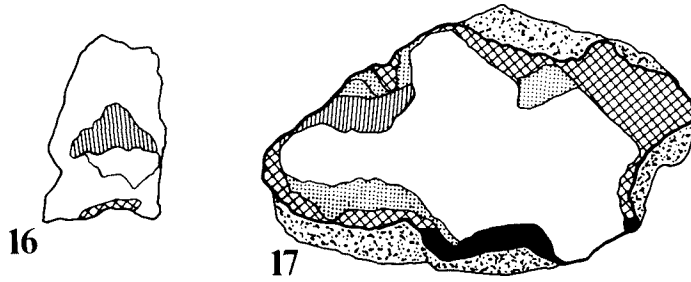
7. LEVEL 833 (VW/14)

One fragment with (?) inscription (0.035 x 0.035 m); coarse pinkish plaster with layer (0.004 m thick) of finer white plaster on top (fig. B, 26).

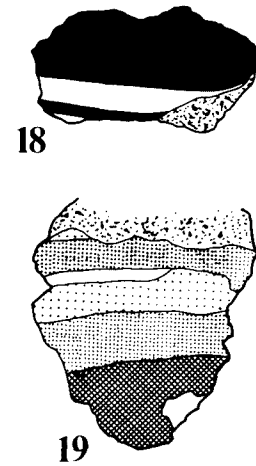
Group 2



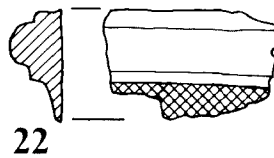
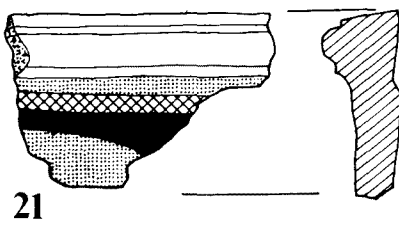
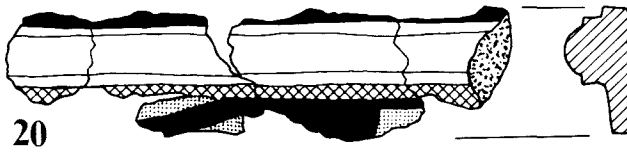
Group 3



Group 4



Group 6



Group 7

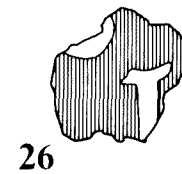
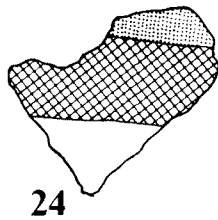
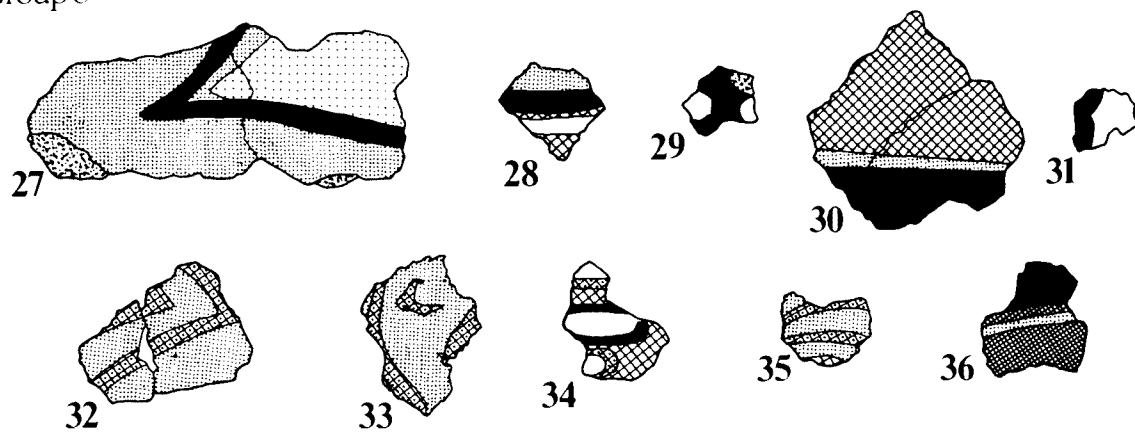
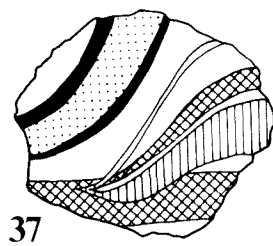


FIGURE B. Plaster Fragments from Groups 2-4, 6, 7
(scale approximately 1:2)

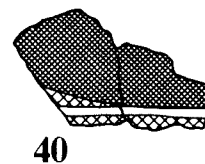
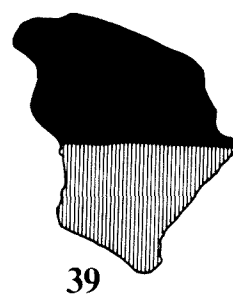
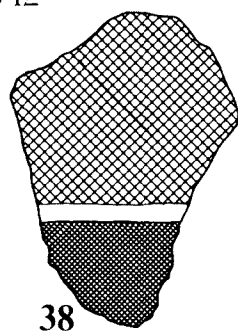
Group 8



Group 11



Group 12



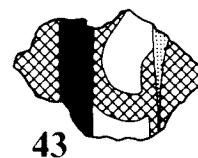
Group 13



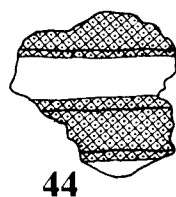
Group 14



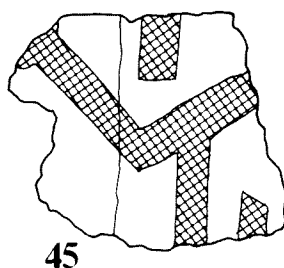
Group 15



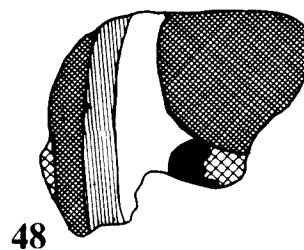
Group 18



Group 19



Group 10



Group 5

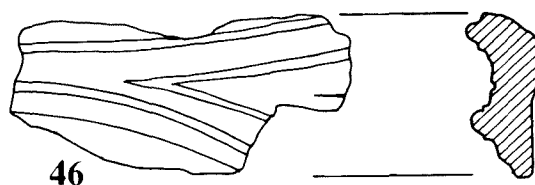


FIGURE C. Plaster Fragments from Groups 5, 8-15, 18, 19
(scale approximately 1:2)

8. LEVEL 1041* (XY/16-17)

Ca. five hundred pieces (largest 0.095 x 0.04 m, majority 0.01-0.03 m) coarse white plaster (many straw impressions) with no distinct layers, of various thicknesses (0.007-0.032 m) (fig. C, 27-36). Some have worn surfaces with faint colours, majority (75%) have clear colours but are too fragmentary to make joins or discover meaningful designs.

Pink plain (ca. sixty); with green (one); with black; with yellow stripe and black; with white stripe, black stripe, and yellow (several fragments of each).

Red plain (ca. sixty); with white (six); with pink (two).

Yellow with black stripe and green; with black; with dark red curving lines.

Pinkish yellow with dark red lines (a few fragments).

Green plain pale green (ca. twenty five); with white (two); with black stripe and yellow (one) with pink (one).

Black plain (ca. thirty) with white spots (four); with white (five)

Grey with black and superimposed yellow stripe (three).

Blue plain (two).

Dark red and black used for outlining and details.

9. LEVEL 1112* (aabb/15-16)

Coarse white plaster: two fragments painted blue, one fragment painted green.

10. LEVEL 1152* (aa/17)

Coarse white plaster: one fragment 0.065 x 0.06 x 0.028 m thick; colours: red, grey, pale blue, white, black (fig. C, 48).

11. LEVEL 1158* (aa/17)

One fragment (0.06 x 0.067 x 0.043 m thick) (fig. C, 37). Fine cream ground on coarse white plaster. Distinguishable design with the following colours: green, black, white superimposed on black, cream superimposed on orange-red, orange-red, white superimposed on blue, pale blue, red, white superimposed on red, natural cream ground, black on cream ground.

12. LEVEL 1193 (aabb/16)

Three fragments:

a. Coarse white plaster (0.08 x 0.055 x 0.03 m thick); black on blue (fig. C, 39).

b. Coarse white plaster (0.58 x 0.078 x 0.026 m thick); red on earlier red, white, and grey on earlier yellow, in stripes (fig. C, 38).

c. Coarse white plaster (0.036 x 0.05 x 0.02 m thick); bluish grey, white on red, red (fig. C, 40).

13. LEVEL 1299 (Y/15)

Three fragments:

a. Coarse pink plaster (0.08 x 0.54 x 0.032 m thick), painted plain deep grey.

b. Coarse white plaster (0.039 x 0.042 x 0.007 m thick) with coating (0.001 m thick) of finer white plaster.

c. Coarse white plaster (0.033 x 0.03 x 0.007 m thick) with coating as b; brownish red (burnt sienna), brownish grey (fig. C, 41).

14. LEVEL 1336* (Z/13-14)

One fragment: Coarse white plaster (0.035 x 0.042 x 0.014 m thick), slightly finer at surface, but no distinct layer (fig. C, 42). Black vertical bar applied over yellow; brownish white details superimposed on colour (dirty brush?); second layer of brighter, thicker white paint applied to row of three dots.

15. LEVEL 1360 (aa/15-16)

One fragment: Whitish plaster (0.037 x 0.048 x 0.012 m thick); black, cream, yellowish (fig. C, 43).

16. LEVEL 1362* (aa/15-16)

One fragment with plain yellowish green paint.

17. LEVEL 1380* (Y-bb/13-15 area)

Two fragments:

PAINTED PLASTER

a. Coarse pinkish white plaster (0.05 x 0.04 x 0.012 m thick) with top layer (0.005 m thick) of finer white; pale brownish pink and cream paint.

b. As a, but top layer 0.002 m thick; black and white stripes?

18. LEVEL 1429 (cc/17)

Four fragments with alternate layers (four) of pink and white plaster; white and brownish red stripes (fig. C, 44).

19. LEVEL 1456 (dd/18)

One fragment of coarse pink plaster (0.075 x 0.065 m) with thick layer of finer white; and white geometric pattern (fig. C, 45).

Chapter Nine

THE WINDOW GLASS

R. M. HARRISON

M. V. GILL

IT IS CLEAR from the very large number of window mullions recovered that the church of St. Polyeuktos was highly fenestrated. It came as a surprise, therefore, that comparatively little window glass was found. One explanation might be that the church was never fully glazed, another that its panes were systematically removed either for immediate reuse or for cullet. Neither explanation is entirely satisfactory. Many mullions have marks of fixing, in the form of a hole drilled into the rebate at top and bottom of the pane for a lead spiggot (such spiggot were found, in two cases *in situ*); some mullions that lacked such holes may have been the vertical bars of a window-frame where such holes were not required, and in other cases there might have been an alternative method of affixing the glass, such as by an adhesive plaster. As for cullet, this was undoubtedly collected in the Middle Ages to be melted down, but there seems to be no evidence for the systematic stripping of a major building for this purpose.

Such window glass as was found came from either circular or rectangular panes and was of various colours. It is presented by findspot in the following catalogue.

1. LEVEL 859 (VW/17)

Circular panes (crown glass).

Transparent brown: dark brown (one centre), medium brown (two centres); yellowy brown (three centres). Diam. of circular panes 0.32 m; th. at centre 0.007 m, at edge (inside turnover) 0.001 m. The panes seem to be blown with a central swelling (and pontil mark at the back), thinning towards the edges. The edges are smooth and turned over for strength (0.003 m, to 0.009 m rim).

Transparent dark olive green: one central swelling (th. 0.007 m), edge turned over to form rim 0.006-0.008 m wide, th. inside rim 0.0015 m, diam. 0.36 m.

Transparent colourless: one central swelling (th. 0.008 m), rim 0.004-0.007 m wide (at widest turned back twice), th. inside rim 0.0015 m, diam. 0.33 m. A few fragments very slightly pink: thick and thin pieces, but no centres and no edges (perhaps a local variation in a pane of colourless glass).

Transparent blue green: at least eight central swellings (th. 0.009 m), rim 0.003-0.008 m wide (one frag. with double turn-back), th. inside rim 0.001 m, diam. 0.36 m.

Square or rectangular panes (cylinder-blown glass).

Transparent bluish green (greener than circular panes): three types of edge, 1. an uneven edge (in most fragments very thin, but in one thick) turned back to give a straight edge; 2. a cut or broken edge, slightly smoothed; 3. the edge smooth. Th. 0.003-0.005 m.

Transparent pale olive green: three edge fragments with turned-back edges 0.025 m wide, th. 0.0025-0.004 m, area ca. 0.18 x 0.18 m.

Translucent olive green: no edges; pieces flat and of even thickness, probably parts of square or rectangular pane. Th. 0.002-0.004 m, area ca. 0.10 x 0.10 m.

2. LEVEL 858 (VW/17)

Transparent brown: one piece with slight swelling (centre?) 0.0025 m th., three edge pieces with turnover rims diam. 0.33 m, th. inside rim 0.0015 m. Other pieces more yellowy brown: two edge fragments diam. 0.26 m and 0.31 m.

Pale transparent yellowish: ten fragments of even thickness 0.003 m (perhaps from square pane).

Transparent blue-green: no edges, but direction of internal bubbles indicates that the few fragments belong towards edge of a circular pane, th. 0.002 m.

Dark olive green: one edge fragment diam. 0.36 m.

Transparent bluish green: two types of edge (uneven

thin edge turned back to give straight edge, and edge with smooth curved profile); twelve fragments join to form piece at least 0.135 x 0.25 m, 0.0055 m th. at edge diminishing to 0.002 m th., surface uneven, area of surviving fragments 0.24 x 0.24 m.

3. Level 863* (VW/17)

Circular panes.

Blue-green: three fragments. Dark olive green: one fragment. Dark brown: one fragment with central swelling.

Rectangular panes.

Transparent bluish green: five fragments. Very pale olive green: one fragment.

4. LEVEL 559* (STU/12-13)

Rectangular panes (th. 0.002-0.0025 m).

Pale, almost colourless: twelve fragments. Pale yellowish brown: fifteen fragments. Pale olive green: eighteen fragments. Medium olive green: eighteen fragments. Blue-green: eight fragments. Pale green-blue: four fragments.

5. LEVEL 564* (STU/12-13)

Rectangular panes (th. 0.0015-0.002 m).

Pale, almost colourless: fifteen fragments. Pale brown: one fragment. Pale yellowish brown: seventeen fragments. Pale olive green: nine fragments. Medium olive green: two fragments. Pale green-blue: two fragments. Green-blue: seven fragments.

6. LEVEL 563* (STU/12-13)

Rectangular panes (th. mostly 0.0015-0.002, but dark and medium olive green 0.003 m).

Pale, almost colourless: three fragments. Pale brown: twenty fragments. Pale yellowish brown: three fragments. Very pale olive green: fifty-five fragments. Pale olive: twenty-eight fragments. Medium olive: nine fragments. Dark olive: one fragment. Pale blue-green: three fragments. Greenish blue: four fragments.

7. LEVEL 1001* (X/12-14)

Blue-green: ten fragments, two with turnover edges diam. 0.30 m, inside rim th. 0.0015 m. Dark olive

green: one fragment with turnover rim diam. 0.32, inside rim th. 0.001 m. Pale olive green: four fragments. Very pale, almost colourless: five fragments.

8. LEVEL 1100 (aa/15-16)

Dark olive green: two edge fragments, diam. 0.30 m, inside turnover th 0.00125 m, w. of turnover edge 0.006 m, and eighteen other fragments thickest 0.005 m.

Medium olive green: one fragment with smooth straight edge, th. 0.004 m.

Dark brown: eight edge fragments w. turnover edges 0.003-0.006 m, th. inside edge 0.001 m, no central swellings, thickest fragment 0.0045 m, diam. 0.30 m; also ca. thirty other fragments.

Blue-green: five fragments with turnover rim 0.005-0.008 m wide, diam. 0.26 m, also ca. forty-five fragments, thickest 0.004 m.

Bluish green: ca. ten fragments.

9. LEVEL 788* (V/12-13)

Bluish green (various shades): ca. eighty fragments 0.0015-0.005 m th., two with smooth straight edge, one with turned-over edge.

Pale olive green: ca. forty fragments, 0.001-0.004 m th.

10. LEVEL 1411 (aa/23 Pit L)

Fragments from at least two circular panes: one large piece colourless transparent glass with pontil on back and slight swirling mark on front (th. 0.0035 m centre, 0.00075 m on another fragment inside turnover). Pale yellowish: thirteen fragments, th. 0.004 m near centre, 0.00075 m at turnover edge, diam. 0.22 m.

Individual pieces or small groups of window glass were recovered as follows: level 84, one fragment; 163*, two; 217, one; 238, one; 476*, one; 671, five; 669, two; 692, one; 726*, one; 729*, nine; 733, one; 855*, one; 856, twenty; 857, two; 861*, two; 862*, two; 869*, three; 871*, one; 906, two; 909*, one; 910*, four; 936*, four; 950, two; 953, five; 986, six; 976, one; 997*, one; 1000*, 31; 1006*, ten; 1051*, ten; 1099, one; 1100, thirty; 1112*, one; 1131*, three; 1262*, two; 1380*, eight; 1451, one.

Groups 4, 5, and 6 are from secure seventh-century contexts, and 3, 7, and 9 are also from apparently uncontaminated Byzantine levels. Groups 1 and 2 are from contaminated Byzantine levels, 8 from a mixed level, and 10 from a mid-sixteenth century level.

Groups 1, 2, 3, 8, and 10 and levels 856 and 869* include circular panes; of these, only Group 3 and level 869* were regarded as uncontaminated Byzantine. Two circular panes occurred in a sixteenth-century level (Group 10); of ca. 2,200 fragments of window-mullion, only one (Chapter 5, 10 c i), and that from an unstratified context (411), was possibly for a circular pane, while the rest were for rectangular or subrectan-

gular panes; only rectangular or subrectangular panes were represented in the seventh-century Groups 4, 5, and 6. In these circumstances, it seems probable that levels 863* (Group 3) and 869* were in fact contaminated, and that the circular (crown) glass is of early Turkish date, perhaps set in wooden frames (unless the one marble mullion is the sole survivor of a series). If the mid-sixteenth-century date of Group 10 (Pit L) is accepted as a *terminus ante quem*, perhaps the circular panes are to be associated with the Karagöz Camii, which was constructed in the southern part of our site in ca. 1493/4.

Chapter Ten

THE BRICKSTAMPS

S. J. HILL

THE CATALOGUE that follows is divided into six sections and illustrated by figs. A-D. Sections A to E cover brickstamps that are classified by shape. Section A covers rectangular stamps with inscriptions of one line only; Section B has rectangular stamps with inscriptions of more than one line; section C has circular stamps; section D has stamps with inscriptions arranged in a cruciform pattern; section E has rectangular stamps with inscriptions arranged around a central cross. The small, final section F is devoted to three fragmentary inscriptions found on curved roofing tiles. In addition to the brickstamps listed below, a further six were discovered, which were too fragmentary, or too blurred, to permit identification, although it was clear that they did not belong to any of the recognized types. The absolute total number of stamped bricks recovered was thus 1,217, on which were represented 134 different stamps: of these, 1,211 bricks and 128 stamps are listed below. There is no significance in the order in which brickstamps are arranged within sections.

Entries are arranged in a standard order. A transliteration of the inscription is given, which is followed by the author's view of how this should be expanded. A conventional arrangement has been adopted for the Greek characters, since the inscriptions take all manner of forms, including *boustrophedon* and *Schlangenschrift*, which do not easily accommodate themselves to typescript: individual characters often appear inverted or retrograde. For both the overall configuration of the inscriptions, and for the appearance of individual characters, reference should be made to the relevant drawing. Dimensions are given in millimetres: a figure in brackets indicates an incomplete measurement, as, for example, when only partial examples of a die have been preserved. The absence of a measurement indicates that it could not be obtained (thus brickstamp A33 was preserved only as an impression which gave no indication of the thickness of the brick involved). The total number of examples of any particular stamp is followed by a list of known contexts. No figure is given for the

number of bricks of unknown or uncertain provenance, but it should be noted that many bricks could be categorised as casual finds, perhaps brought in by construction workers. Some brickstamps (e.g., D4) fall into this category, since only one brick of uncertain context may be attributed to the type. It would be rash to consider such examples as capable of being attributed to the primary phase of building, or, indeed, as definitely belonging to the church. They form, of course, a group of no statistical significance in overall terms.

It has been necessary to insert group entries (e.g., C13-15) for brickstamps which were too fragmentary, or too blurred, to be attributed to an individual type, but which evidently belonged to a group of similar types of stamp.

A1. ΥΟΤΗΠΑΓΑ +

+ 'Αγαπητοῦ

Die 150 × 34 mm; brick 30 mm thick, 380 × 380 mm (fig. A).

Twenty-eight examples, collapsed staircase vault.

A2. ΙΝΔΙΑ ΑΓΑΠΗΤΩ

ἰνδ(ικτιῶνος) ια' 'Αγαπητοῦ

Die 123 × 25 mm; brick 40 mm thick, 500 × 380 mm (fig. A).

One example; 515.

A3. ΙΝΔΣΔΑΡΓ

ἰνδ(ικτιῶνος)S δ' 'Αργ[-

Die (153) × 40 mm; brick 32-35 mm th. (fig. A).

Three examples; 671, 678, 1381.

A4. + ΑΡΙCΤΑΙΝCΙΝΑ

+ 'Αρισταιν(-)S ἰν(δικτιῶνος) κα'

Die (140) × 36 mm; brick 35 mm thick (fig. A).

Ten examples; 103, 146, 217, 299, 700*, 724, 727, 782, 989.

A5. INSBAPΓEA

ἰν(δικτιῶνος) S β' Ἀρ() Γελ[αίου]

Die 123 × 33 mm; brick 45 mm thick (fig. A).
One example.

A6. ΙΝΑΣΓΒΑ

–] ἰνδ(ικτιῶνος) S γ' Βα[–

Die (110) × 40 mm; brick 40–50 mm thick (fig. A).
Three examples; 129, 596.

A7.¹ ΙΝΘΒΑΔΩ

ἰν(δικτιῶνος) Θ' Βα(–) Δω(–)

Die 163 × 32 mm; brick 50–60 mm thick (fig. A).
Two examples; 1000.*

A8. ΕΠΙΦΑΝΙΟΥΔΙΣ

Ἐπιφανίου S ἰδ'

Die 118 × 41 mm; brick 30–35 mm thick (fig. A).
Three examples; 566*, 671, 859.

A9. ΥΟΙΝΑΦΙΠΕ +

+ Ἐπιφανίου

Die 120 × 40 mm; brick 35 mm thick (fig. A).
Thirty-one examples; 138, 165, 367, 381*(two), 684, 745*, 831*, 871*, 948, 977*, 994*, 1017*, 1020*, 1029*, 1059, 1072(two), 1092*, 1140*, 1159*, 1162*, 1362*, 1380*, 1451, wall west of slip road (two).

A10. ΔΒΑΕΥCΤΑ

δ' Βα(–) Εὔστα(θίου)

Die 149 × 29 mm; brick 55 mm thick (fig. A).
One example; 6.

A11. +ΙΝΔSI-ΗΛΙΟΔS

+ ἰνδ(ικτιῶνος) S ι' Ἡλιοδ(ώρου) S

Die 192 × 41 mm; brick 40–45 mm thick, 370 × 360 mm (fig. A).
One example.

A12.² +ΙΝΔSIΔΗΛΛΙΟΔS

+ ἰνδ(ικτιῶνος) S ἰδ' Ἡλλιοδ(ώρου) S

Die 235 × 32 mm; brick 40 mm thick, 360 × 350 mm (fig. A).
Sixteen examples; 58, 87*, 165, 211, 302*, 833, fallen vault in atrium (nine), south pilaster against west church wall.

A13. INBBAPΘEOΔ

ἰν(δικτιῶνος) Β' Βαρ(–) Θεοδ(ώρου)

Die (100) × 23 mm; brick 32–35 mm thick (fig. A).
One example.

A14. INHBAKAKY

ἰν(δικτιῶνος) η' Βα(–) Καλκυ(–)

Die 177 × 29 mm; brick 51–55 mm thick, side 370 mm (fig. A).
Three examples.

A15. ΙΝΓΒΑΚΥΡ

ἰν(δικτιῶνος) γ' Βα(–) Κυρ(ιάκου)

Die 137 × 26 mm; brick 52–58 mm thick (fig. A).
One example; 13*.

A16. INIBM

ἰν(δικτιῶνος) ιβ' Μ(άρκου)

Die (112) × 27 mm; brick 30–35 mm thick (fig. A).
One example; 1272*.

A17. INHBAMAP

ἰν(δικτιῶνος) η' Βα(–) Μάρ(κου)

Die 157 × 22 mm; brick 55–60 mm thick, side 370 mm (fig. A).
One example.

A18. ΙΝΓΒΑΝΕ

ἰν(δικτιῶνος) γ' Βα(–) Νε(–)

Die 118 × 29 mm; brick 50–55 mm thick, 390 × 390 mm (fig. A).
One example; 13*.

A19. INIBALΞ

{ ἰν(δικτιῶνος) ι' Βα(–) Λε[–
{ ἰν(δικτιῶνος) ιβ' Ἀλεξ(άνδρου)

Die (127) × 26 mm; brick 47–55 mm thick, side 380 mm (fig. A).
One example.

A20. ΑΠΑΥ

Β[α(–) Παύ(λου)]

Die (111) × 39 mm; brick 40 mm thick (fig. A).
One example.

A21. ΥΟΛΥΑΠ

Παύ(λου)

ΘΗΤΑΔΗ

A1

ΙΝΔΙΑΛΑΓΑΠΗΤΥ

A2

ΙΝΔΙΑΔΑΔΗ

A3

†ΑΡΙΣΤΑΙΝ'ΙΝ'Α

A4

ΗΝΒΑΓΓΕ

A5

ΗΝΒΑΓΓΕ

A6

ΗΝΒΑΓΓΕ

A7

ΕΠΙΦΑΝΙΟΥ

A8

ΥΟΙΝΑΦΙΠΘ

A9

ΥΒΑΕΥΣΤΑ

A10

†ΙΝΔΙΑ-ΗΛΙΟΥ

A11

†ΙΝΔΙΑ-ΗΛΙΟΥ

A12

ΙΝΒΑΡΘΕΟΛ

A13

ΙΝΗΒΑΚΑΛΚΥ

A14

ΙΝΗΒΑΚΥΡ

A15

ΙΝΙΒΛ

A16

ΙΝΗΒΑΝΑΒ

A17

ΙΝΗΒΑΝΕ

A18

ΙΝΙΒΑΝΕ

A19

ΑΤΤΑΥ

A20

ΥΟΛΥΑΝ

A21

ΠΕΤ

A22

ΥΠΕΤ

A23

ΙΝΗΒΑΝΑΤ

A24

ΙΣΤΕ

A25

†ΙΝΔΙΑΤΡΟΠ

A26

ΦΙΜΜΑΤ

A27

ΜΙΦΟΡΤΑΙΔΗ

A28

ΙΝΔΙΑ

A29

ΔΑΔΤΕΡΟΠ

A30

ΔΑΡ

A31

ΗΑΑΗ

A32

ΒΑΡΙΣΤΕ

A33

FIGURE A. Brickstamp Categories A1-A33 (scale 1:4)

Die (120) × 37 mm; brick 38-41 mm thick (fig. A).
One example; 1005*.

A22. ΠΕΤΡ

Πέτρου

Die (70) × 36 mm; brick 45 mm thick (fig. A)
One example; 65.

A23. ΥΟΡΤΕΠ

Πέτρου

Die 94 × 39 mm; brick 35-38 mm thick, side 360 mm (fig. A).
One example; 560*.

A24. ΙΝΗΒΑΣΑΠ

ἰν(δικτιῶνος) ἡ' Βα(-) Σαπ(-)

Die 153 × 26 mm; brick 50 mm thick, side 380 mm (fig. A).
One example.

A25. ΙCTES

-]ι' Στε(φάνου)S

Die (130) × 36 mm; brick 30 mm thick (fig. A).
One example; 1003.

A26. +ΙΝΔΙΑΤΡΦΙ

+ ἰνδ(ικτιῶνος) ια' Τρ(ο)φί(μου)

Die 151 × 39 mm; brick 35-40 mm thick, side 335 mm (fig. A).
Thirty-three examples; 165 (two), 434, 667, 700, 833*, 845*, 859, 874*, 912*, 920* (five), 1000*, 1005* (nine), 1072, 1074 (two), 1098*, 1362*, wall west of slip road.

A27. ΟΦΙΜΙΝΔΑ

Τρ]οφί(μου) ἰνδ(ικτιῶνος) α'

Die (103) × 24 mm; brick 44 mm thick (fig. A).
One example; 642.

A28.* ΥΟΜΙΦΟΡΤΑΙΔΝΙ*

* ἰνδ(ικτιῶνος) ια' Τροφί(μου)*

Die 220 × 42 mm; brick 37-39 mm thick (fig. A).
Seven examples; 356, 725* (two), 733, 977*, 1005*.

A29. ΙΝΔΣΔΒΑΡ

ἰνδ(ικτιῶνος)S δ' Βαρ[-

Die (132) × 42 mm; brick 30 mm thick (fig. A).
One example; 700*.

A30. ΔΑΡΙCTEIS +

δ' ἈριCTεί(ου)S +

Die 188 × 42; brick 35 thick (fig. A).
Four examples; 131, 159, 600, 1230.

A31. ΒΑΡSA

Βαρ(-)S Ἀ[-

Die (80) × 40 mm; brick 35 mm thick (fig. A).
One example; 1266*.

A32. +.A.

+ .α.[-

Die (110) × 45 mm; brick 25 mm thick (fig. A).
Twelve examples; 61, 424 (two), 484, 725* (two), 729, 738*, 785*, 853, 1010.

A33. ΒΣΑΡΙCTEI

B Σ ἈριCTεί(ου)

One example; in mortar make-up of brick floor between 1118* and 1119* (fig. A).

B1.³ +THCN

EACAΓA

ΘΟΝΙΚΟΥ

+ τηc v

έας Ἀγα

θονίκου

Die 161 × 90 mm; brick 34 mm thick (fig. B).
Two examples; 725*, 967.

B2. ΙΝΔ

ΑΥΞ

ἰνδ(ικτιῶνος)[. .

Αὐξ[αντίου

Die (50) × (60) mm; brick 35 mm thick (fig. B).
One example; 938*.

B3. ΒΙSΔΝΙ

BACHA

ΙΚΟΥ +

ἰνδ(ικτιῶνος)S ιβ'

Βασηλ

ίκου +

Die 100 × 79 mm; brick 35-40 mm thick, side 350 mm (fig. B)
Five examples; 95, 501, 650*, 886.

B4.⁴ +ΓΑ+
 IOY+
 +Γα+
 ίου+

Die 88 × 67 mm; brick 38-43 mm thick, 355 × 380 mm (fig. B).
 One example.

B5. ΔIMI
 ΤΡΙΟΥ

Διμι
 τρίου

Die 81 × 68 mm; brick 32-34 mm thick (fig. B).
 Two examples; 826*, 907.

B6. +THCN
 EACΔO
 MNOY
 +τηc v
 έac Δό
 μνου

Die 172 × 92 mm; brick 35 mm thick (fig. B).
 Two examples; 700*, 908.

B7. +INΔSK
 ΜΟΔΘS
 ΝΟΥΔΙ
 ΑΒ+SKA
 +ινδ(ι)Sκ(τιώνoc)
 S θ' Δόμ
 νου δι
 άκ(ονoc)S + βα(-)

Die 108 × 92 mm; brick 35-45 mm thick (fig. B).
 Nine examples; 84, 165, 702*, 828, 898, 977*, 1001* (two).

B8. +POY
 ΔΟΥ
 ΘΕΩ
 Θεω
 δού
 ρου+

Die 100 × 88 mm; brick 45-50 mm thick (fig. B).
 Three examples; 87*, 725*, 833*.

B9. ONC
 NTIN
 [+K]ovc
 [τα]ντίv(ou)

Die (100) × ca. 75 mm; brick 38 mm thick (fig. B).
 One example; 1001*.

B10. +INΔ
 ΝΟΥ
 ΤΑΝΤΙ
 +KONC
 +ινδ(ι)κτιώνoc[.]
 νου
 ταντί
 +Κονσ

Die 81 × (70) mm; brick 41 mm thick (fig. B).
 Twelve examples; 476*, 1001*, north aisle—demolished wall (nine).

B11. monogram
 +Κονσταντίvου

Die 72 × 77 mm; brick 39 mm thick (fig. B).
 Four examples; 434, 692, 700*.

B12. KOC
 ΤΑΝ
 Κο(v)c
 ταν(τίvου)

Die 83 × 58 mm; brick 42 mm thick (fig. B).
 Eight examples; 499, 725* (two), 742, 1005*, north aisle—demolished wall (two).

B13. KOC
 ΤΑΝ
 Κο(v)c
 ταν(τίvου)

Die 75 × 68 mm; brick 40 mm thick (fig. B).
 Eight examples; 95, 165 (two), 674, 859 (two).

B14.⁵ +KOC
 ΤΑΝ
 +Κο(v)c
 ταν(τίvου)

Die 65 × 55 mm; brick 45 mm thick (fig. B).
 Two examples; 655, 1121*.

B15.⁶ +KO
 ΤΑ
 +Κο(v)[c]
 τα[v](τίvου)

Die (70) × 65 mm; brick 45 mm thick (fig. B).
 One example; 655.

B16. KOC

NAT

Κο(ν)Ϸ
ταν(τίνου)

Die 75 × 64 mm; brick 33 mm thick (fig. B).
One example; 1010.

B17. OC

NAT

[Κ]ο(ν)Ϸ
ταν(τίνου)

Die 74 × 68 mm; brick 45 mm thick (fig. B).
Two examples; 600, 736.

B18.⁷ +KOC

TAN

+Κο(ν)Ϸ
ταν(τίνου)

Die 85 × 78 mm; brick 35-40 mm thick (fig. B).
One example; 1001[★].

B19. +KO

TAN

+Κο(ν)[Ϸ]
ταν(τίνου)

Die 69 × 59 mm; brick 33-39 mm thick (fig. B).
Five examples; 94, 833[★], 898, 1165[★].

B20. COK +

NAT

+Κο(ν)Ϸ
ταν(τίνου)

Die 90 × 77 mm; brick 40 mm thick, 385 × 375 mm
(fig. B).
Nine examples; 26[★], 32[★] (two), 1237[★], 1252[★].

B21.⁸ +KOC

TANS

+Κο(ν)Ϸ
ταν(τίνου)S

Die 131 × 68 mm; brick 40-47 mm thick (fig. B).
One example; 1237[★].

B12-21. Eight examples; 700, 736, 853, 859, 925, 1010,
1357, 1381.

B22. +KOC

TAN

SΔINS

+ΚοϷ
ταν(τίνου)
S δ' ἰν(δικτιῶνος) S

Die 78 × 75 mm; brick 35 mm thick, 365 × 375 mm
(fig. B).

Forty-one examples; 59, 87[★], 229, 297, 312, 338[★], 532,
593[★], 596, 599 (three), 600 (twelve), 725[★] (three), 736,
833[★], 851[★], 898, 912[★], 1003, 1362[★].

B23. KOC

TAN

SHNI

Κο(ν)Ϸ
ταν(τίνου)
S ἰν(δικτιῶνος) η'

Die (ca. 70) × 77 mm; brick 32-40 mm thick (fig. B).
Three examples; 279, 673.

B24. KYPI

AKS

Κυρι
ἀκ(ου)S

Die 76 × 63 mm; brick 38 mm thick (fig. B). Five
examples; 502[★] (two), 642.

B25. +ΚΩN

CTAN§

+Κων
ctαν(τίνου)§

Die 110 × 60 mm; brick 35 mm thick (fig. B).
Two examples; 700[★], 782.

B26.⁹ +ΚΩNCT

ANTINS

+ΚωνϷ
αντί(ου)S

Die (ca. 100) × 62 mm; brick 35-40 mm thick (fig. B).
Two examples; 736, 904.

B27. CTA

NOYI

ΔSB +

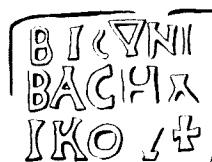
[Κο](ν)ctαν
[τι]νου ἰ
[ν]δ(ικτιῶνος)S β' +



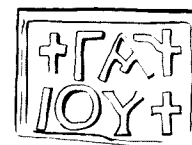
B1



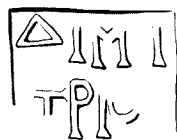
B2



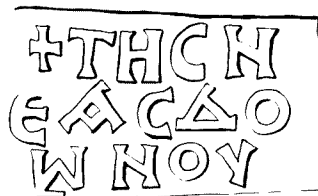
B3



B4



B5



B6



B7



B8



B9



B10



B11



B12



B13



B14



B15



B16



B17



B18



B19



B20



B21



B22



B23



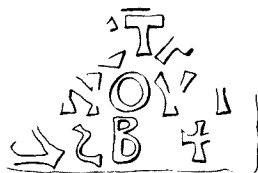
B24



B25



B26



B27



B28



B29



B30



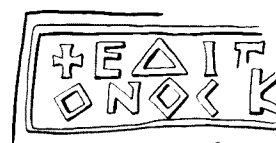
B31



B32



B33



B34

FIGURE B. Brickstamp Categories B1-B34 (scale 1:4)

Die (38) × 81 mm; brick 43 mm thick (fig. B).
One example.

B28. INΔI

KSAI

ΜΑΡΚΟΥ

ινδι

κ(τιῶνος)S ιδ'

Μάρκου

Die 88 × 78 mm; brick 32-36 mm thick, side 370 mm (fig. B).

Three examples; collapsed staircase vault (three).

B29. ΝΕΝΕΑ

ΔΡΟCEB

?

Die 127 × 74 mm; brick 35-38 mm thick (fig. B).
One example; 398*.

B30.

TAN

TSINS

[Κονc]

ταν

τ(ίνου) S ιν(δικτιῶνος)S[.]

Die 81 × 54 mm; brick 38-40 mm thick (fig. B).
One example; 229.

B31. +TPO

ΘΥΝΟΥ

+Tpo

θύνου

Die (72) × 66 mm; brick 37 mm thick (fig. B).
One example; 365*.

B32. ΤΡΟΦ

ΟΥ+

Τροφ

[ιμ]ον+

Die (85) × (56)mm; brick 43 mm thick (fig. B).
One example; 83.

B33. +ENΔ

IKSZ+

+ενδ

ικ(τιῶνος)S ζ'+

Die 111 × 62 mm; brick 26-27 mm thick (fig. B).
Two examples; 828, 859.

B34. +ΕΔΙΓ

ΟΝΟΚ

+ἐ(ν)δ(ικτιῶνος) ιγ'

ονοκ ?

Die (144) × 64 mm; brick 30-40 mm thick (fig. B).
Five examples; 165, 233, 434, 600, 831*.

C1.

IE

AY

(two lines missing)

ιε'[. . .]

Αὐ[ξ](αντίου)

Die diameter ca. 110 mm; brick 30-35 mm thick (fig. C).

Two examples; 131, 140.

C2. ΘΕΟΔΩΡΟ+INE

Θεοδώρο(υ) + ιν(δικτιῶνος) ε'

Die 85-100 mm diameter; brick 40 mm thick (fig. C).
Seven examples; 24, 66, 94, 123, 192, 725*. Wall west of slip road.

C3. +ΘΕΟΔΩΡΟΙΝΑΣ

+Θεοδώρο(υ) ινδ(ικτιῶνος)S[.]

Die 100 mm diameter; brick 30 mm thick (fig. C).
Four examples; 828 (two), 1072 (two).

C4. ΘΕΟΔΩΡΟ

Θεοδώρο(υ)

Die 72 mm diameter; brick 36-40 mm thick, 365 × 365 mm (fig. C).
One example; 702*.

C5.¹⁰ ΘΕΟΔΩΡΟΥ

Θεοδώρου

Die 72 mm diameter; brick 36-40 mm thick, 365 × 365 mm (fig. C).
Eleven examples; 61, 86, 87*, 828, 831*, 833*, 924, 1005* (three), 1330A.

C6. ΘΕΟΔΩΡΟΥ

Θεοδώρου

Die 77 mm diameter; brick 33-35 mm thick, side 380 mm (fig. C).
Twelve examples; 50 (two), 56*, 61 (two), 87* (two), 165, 725*, 920*, 982*.

C4-6. 4 examples; 674, 833, 1005, 1091.

C7.¹¹ ΝΩΚ
NATC
ΩΝΙΤ

Κων
σαν
τίνου

Die 92 mm diameter; brick 39 mm thick (fig. C).
Eighteen examples; 279, 593*, 678, 700* (three), 725*,
737, 738 (two), 880*, 1015*, 1237 (two), 1330A (two).

C8. ΙΝΟ
ΤΝΑΤ
ΚΩΝC
ίνου
ταντ
Κωνc

Die 80 mm diameter; brick 22-30 mm thick (fig. C).
Five examples; 61, 332, 392, 736. Wall west of slip
road.

C7-8. Two examples: 98, 138.

C9. ΔΝΙ+
ΟΡΤΗ
ΙΦ
ΥΟ
+ ἰνδ(ικτιώνος)
ἡ Τρο
φί[μ]
ου

Die 80 mm diameter; brick 40 mm thick (fig. C).
Three examples; 74, 1000*.

C10. ΝΙ+
ΡΤΒ
ΜΙΦ
ΥΟ
+ ἰν[δ](ικτιώνος)
β' Τρ[ο]
φίμ
ου

Die 100 mm diameter; brick 34 mm thick (fig. C).
Two examples; 181, 483.

C11. + monogram

ΙΝΔΗ

+ monogram
ἰνδ(ικτιώνος) ἡ'

Die 109 mm diameter; brick 39 mm thick (fig. C).
Seven examples; 65, 725*, 859, 908, 1206 (two).

C12.¹² monogram

ἡ Χάρις ?

Die 82 mm diameter; brick 42 mm thick, 360
× 350 mm (fig. C).

Eighteen examples; 924, 1121* (wall) (sixteen), 1440.

C13. monogram

τῆς νέας Πέτρου ?

Die 103 mm diameter; brick 37-50 mm thick (fig. C).
Twenty-four examples; 165, 288, 307, 382, 539, 667,
692, 700*, 720, 725*, 837*, 851* (two), 859 (three),
867, 920* (two), 1010, 1038, 1345.

C14. monogram

τῆς νέας Πέτρου ?

Die 103 mm diameter; brick 42-58 mm thick (fig. C).
Thirty-one examples; 252, 724, 725*, 833*, 837*, 851*
(two), 859 (eight), 909*, 920* (two), 924 (three), 1206,
1252*.

C15. monogram

τῆς νέας Πέτρου ?

Die 102 mm diameter; brick 35-45 mm thick (fig. C).
Seventeen examples; 165, 465*, 700*, 725*, 729*, 733,
833*, 859, 867, 912*, 1005*, 1074, 1298, 1379.

C13-15.¹³ Forty-three examples; 61, 86 (two), 87*,
465*, 594*, 692, 700* (two), 713*, 720 (two), 724,
725* (two), 733, 745*, 830*, 831*, 833*, 837*, 844*,
851* (two), 859 (six), 867, 906, 920*, 924 (two), 1003,
1005*, 1037, 1038, 1059 (three), 1113.

C16. monogram

Γράπτου ?

Die 68 mm diameter; brick 40 mm thick, 365 × 355
mm (fig. C).
One example; 1121* wall.

C17.¹⁴ cipher

Die 69 mm diameter; brick 37-41 mm thick, side 380
mm (fig. C).
Six examples; 13*, 685, 725*.

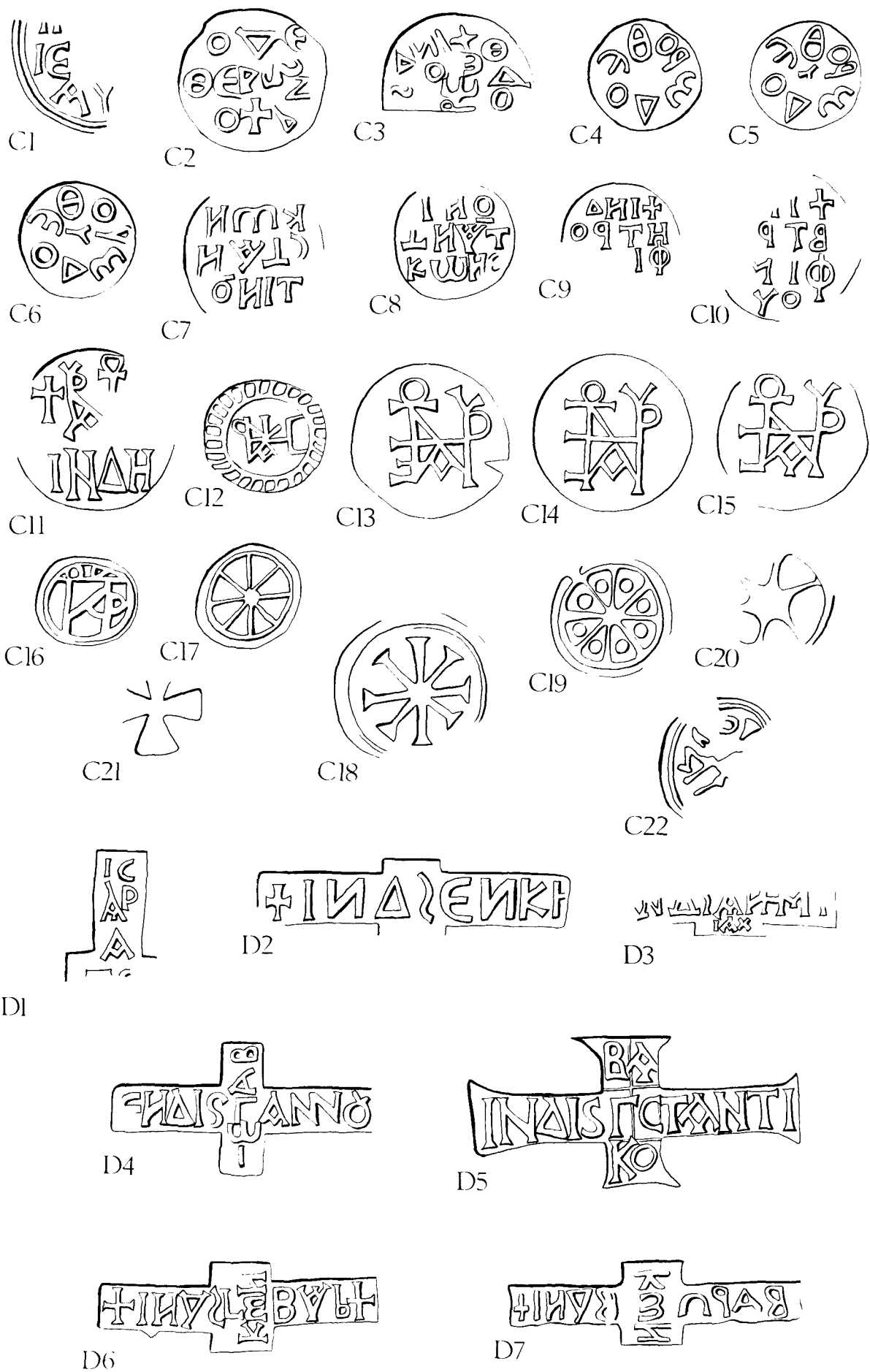


FIGURE C. Brickstamp Categories C1-C22, D1-D7 (scale 1:4)

C18. cipher

Die 114 mm diameter; brick 29-33 mm thick (fig. C).
Thirty-eight examples; 65, 87*, 94, 227, 229, 473, 665, 700*, 702*, 725* (two), 782, 828, 831*, 833* (three), 851*, 859, 909*, 977* (four), 1000*, 1001*, 1005* (eight), 1298, 1345, north aisle—demolished wall.

C19.¹⁵ cipher

Die 80 mm diameter; brick 30-45 mm thick (fig. C).
Eight examples; 909, 1121* wall (seven).

C20. cipher

Die 65 mm diameter; brick 34 mm thick (fig. C).
Two examples.

C21. cipher

Die 67 mm across; brick 35-45 mm thick (fig. C).
One example; 920*.

C22. indecipherable

Die 85 mm diameter; brick 30 mm thick (fig. C).
Two examples; 1077, 1345.

D1. IC

AP

A

B]α(-) 'Αϱι(-)

Die (70) × 32 mm; brick 40 mm thick (fig. C).
One example; 1001*.

D2. +INΔSENKΣ

+ιν(δι)κτιώνος δ' S ἐνκΣ

Die 213 × 52 mm; brick 35 mm thick (fig. C).
Forty-seven examples; 94, 124, 165, 233, 484, 700*, 713*, 735, 785*, 828, 851*, 909*, 920*, 922*, 977* (two), 994*, 1000*, 1001*, 1006*, 1010 (four), 1029* (two), 1058, 1092*, 1109*, 1111, 1151*, 1204 (two), 1266*, 1268, 1297*, 1330A, 1345 (two), 1359 (two), 1362*, 1381, wall west of slip road (two).

D3.

NΔSANH̄M

IAX

(one line missing)

.i]νδ(ι)κτιώνος S α' νημ

'Ιάχ(ου)

Die (139) × (32)mm; brick 35-40 mm thick (fig. C).
One example; 1001*.

D4.

B

A

ENΔISΓAN̄NŌY

ω

I

ἐνδι(κτιώνος)S γ' Βα(-) 'Ιωάννου

Die 182 × 92 mm; brick 37 mm thick (fig. C).
One example.

D5.

BA

INΔISΓCTANTI

KO

ινδι(κτιώνος)S γ' Βα(-) Κο(ν)ctαντί(νου)

Die 216 × 96 mm; brick 48 mm thick (fig. C).
Six examples; 544, 600, 673, 700*, 1266*.

D6.

N

+INΔSΓΩBAP+

K

+ινδ(ι)κτιώνος S γ' Βαϱ(-) Κων(ctαντίνου)+

Die 187 × 64 mm; brick 35-43 mm thick, 365 × 355 mm (fig. C).

Thirty-one examples; 131 (five), 138 (four), 140 (twelve), 142 (two), 216, 233, 272 (two), 1324*, 1371*.

D7.¹⁶

K

+INΔSΓΩCPAB

N

+ινδ(ι)κτιώνος S γ' Βαϱ(-) Κωνc(ταντίνου)

Die 192 × 60 mm; bricks 40 mm thick, 355 × 365 mm; 45 mm thick, 360 × 360 mm (fig. C).

Twenty-six examples; 131 (three), 140 (four), 229 (four), 603*, wall west of slip road (five).

D8.

K

INΔSΓΩCPA

N

[+ινδ(ι)κτιώνος]s γ' [B]αϱ(-) Κωνc(ταντίνου)

Die (165) × 63 mm; brick 34-37 mm thick (fig. D).
Three examples; 131, 140, 147.

D6-8. Thirty-five examples; 37, 131 (six), 140 (eighteen), 143, 165, 229 (three), Wall west of slip road.

D9. K

+INΔΣΓΩCPAB +
N

+ἰνδ(ικτιῶνος)S γ' Βαρ(-) Κων(ταντίνου)

Die 190 × 70 mm; brick 35-40 mm thick, side 375 mm (fig. D).

Seventeen examples; 131 (seven), 138, 140 (six), 143, 165.

D10. I

N
+ΚΩΝΔ
S
Γ

ἰνδ(ικτιῶνος)S γ' [Βαρ] Κων [ctαν](τίνου)

Die (80) × (35)mm; brick 35-40 mm thick (fig. D).

Three examples; 131, 138, 140.

D11. Γ

S
+ΚΩΝΔCTAN
N
I

+ἰνδ(ικτιῶνος)S γ' Κωνctαν(τίνου)

Die 227 × 58 mm; brick 30-35 mm thick, 375 (fig. D).

Seven examples; 229 (two), 692, between 1118 and 1119*, wall west of slip road (two).

D12.¹⁷ MOY

+INΔS IA +

+ἰνδ(ικτιῶνος) S ια' Μου(κίου)

Die 149 × 52 mm; brick 38 mm thick (fig. D).

Fifteen examples; 159, 165, 213*, 499, 547*, 613*, 697*, 1001*, 1059, 1159*.

D13. I

N
ΓΔ
AB

+ἰνδ(ικτιῶνος) γ' Βα[-

Die (86) × (80)mm; brick 40 mm thick (fig. D).

Two examples; 138, 655.

D14. K

+INΔΒΩCPAB
N

+ἰνδ(ικτιῶνος) Β' Βαρ(-) Κων(ταντίνου)

Die 200 × 59 mm.

One example.

E1. $\frac{\Pi}{T} \mid \frac{E}{P}$

+Πέτρ(ου)

Die 89 × 70 mm; brick 40 mm thick (fig. D).

Two examples; 52, 1005*.

E2. $\frac{\Pi}{T} \mid \frac{E}{PK}$

+Πέτρ(ου) κ'

Die 94 × 71 mm; brick 35-40 mm thick.

Eight examples; 512*, 517, 866, 867, 1005*, 1015*, 1081* (fig. D).

E3. $\frac{\Pi}{T} \mid \frac{E}{PA}$

+Πέτρ(ου) λ'

Die 83 × 70 mm; brick 35-40 mm thick.

Four examples; 252, 677, 1081* (two) (fig. D).

E4. $\frac{+}{-} \mid \frac{E}{PN}$

+ [Π]έ[τ]ρ(ου) ν'

Die (80) × 70 mm; brick 40-45 mm thick (fig. D).

Two examples; 158, 906.

E5. $\frac{\Pi}{T} \mid \frac{E}{PO}$

+Πέτρ(ου) ο'

Die 84 × 75 mm; brick 40 mm thick (fig. D).

Four examples; 851*, 1081*.

E6. $\frac{\Pi}{T} \mid \frac{E}{PY}$

+Πέτρ(ου) υ'

Die 84 × 73 mm; brick 35-42 mm thick (fig. D).

Nine examples; 164, 165 (two), 725*, 738, 859, 1005*.

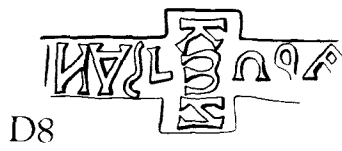
E1-6. Six examples; 484, 920*, 1015*, 1081*.

E7. $\frac{E}{T} \mid \frac{\Pi}{P}$

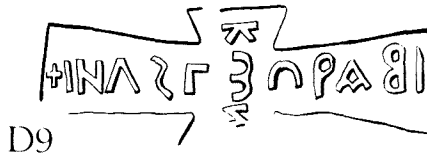
+Πέτρ(ου)

Die 103 × 71 mm; brick 35-45 mm thick (fig. D).

Four examples; 87*, 181, 977*, 1059.



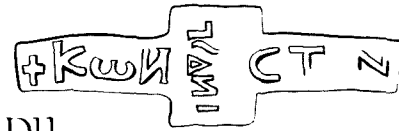
D8



D9



D10



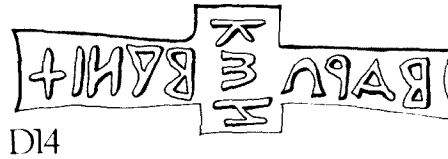
D11



D12



D13



D14



E1



E2



E3



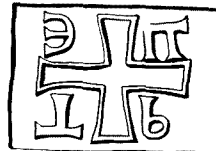
E4



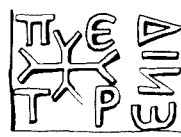
E5



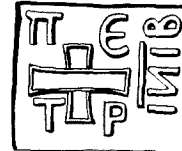
E6



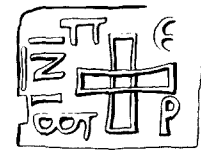
E7



E8



E9



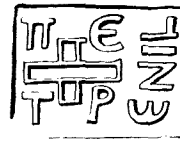
E10



E11



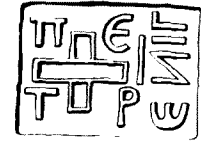
E12



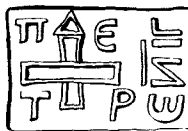
E13



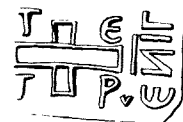
E14



E15



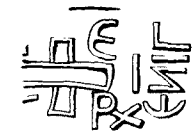
E16



E17



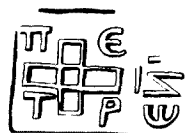
E18



E19



E20



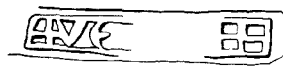
E21



E22



F1



F2



F3

FIGURE D. Brickstamp Categories D8-D14, E1-E22, F1-F3 (scale 1:4)

E8. $\begin{array}{c} \Delta \\ \Pi \quad E \quad I \\ T \quad P \quad N \\ E \end{array}$

+ Πέτρο(ου) ἐν(δικτιῶνος) ιδ΄

Die 86 × 60 mm; brick 35 mm thick (fig. D).
Two examples; 830*.

E9. $\begin{array}{c} B \\ \Pi \quad E \quad I \\ T \quad P \quad N \\ I \end{array}$

+ Πέτρο(ου) ἰν(δικτιῶνος) ιβ΄

Die 86 × 73 mm; brick 40 mm thick (fig. D).
Four examples; 165, 252, 600, 700*.

E10. $\begin{array}{c} I \\ N \quad \Pi \quad E \\ I \quad T \quad R \\ B \end{array}$

+ Πέτρο(ου) ἰν(δικτιῶνος) ιβ΄

Die 89 × 68 mm; brick 30-39 mm thick (fig. D).
Eight examples; 295, 851*, 971, 1081*, 1292.

E11. $\begin{array}{c} I \\ N \quad \Pi \quad E \\ I \quad T \quad P \\ B \end{array}$

+ Πέτρο(ου) ἰν(δικτιῶνος) ιβ΄

Die 91 × 71 mm; brick 35-40 mm thick (fig. D).
Eight examples; 724, 908, 991, 1003, 1010, 1038, 1059, 1081*.

E10-11. Nine examples; 272, 702*, 867, 1003, 1029*.

E12. $\begin{array}{c} \Pi \quad E \quad N \\ T \quad P \quad E \end{array}$

+ Πέτρο(ου) ἐν(δικτιῶνος) [. .]

Die 85 × 61 mm; brick 40 mm thick (fig. D).
One example; 272.

E13. $\begin{array}{c} \Gamma \\ \Pi \quad E \quad I \\ T \quad P \quad N \\ E \end{array}$

+ Πέτρο(ου) ἐν(δικτιῶνος) ιγ΄

Die 83 × 65 mm; brick 30-35 mm thick (fig. D).
Thirteen examples; 898, 1000*, 1001*, 1010.

E14. $\begin{array}{c} \Gamma \\ \Pi \quad E \quad I \\ T \quad P \quad N \\ E \end{array}$

+ Πέτρο(ου) ἐν(δικτιῶνος) ιγ΄

Die 91 × 66 mm; brick 40-45 mm thick (fig. D).
Six examples; 898, 909*, 1001*, 1005*, 1362*.

E15. $\begin{array}{c} \Gamma \\ \Pi \quad E \quad I \\ T \quad P \quad N \\ E \end{array}$

+ Πέτρο(ου) ἐν(δικτιῶνος) ιγ΄

Die 88 × 65 mm; brick 35-50 mm thick (fig. D).
Twenty-one examples; 844*, 851*, 924 (two), 925*, 977* (two), 991, 1000*, 1059, 1109* (three), 1112*, 1362* (three).

E14-15. Four examples; 924, 1058.

E16. $\begin{array}{c} \Delta \quad \Gamma \\ \Pi \quad E \quad I \\ T \quad P \quad N \\ E \end{array}$

+ Πέτρο(ου) δ΄ ἐν(δικτιῶνος) ιγ΄

Die 90 × 60 mm; brick 32-35 mm thick (fig. D).
Eighteen examples; 700*, 702*, 833*, 908, 909*, 977* (three), 991, 1000* (two), 1059, 1109*, 1136, 1196.

E17. $\begin{array}{c} \Gamma \\ \Pi \quad E \quad I \\ T \quad P \quad N \\ E \end{array}$

+ Πέτρο(ου) ν΄ ἐν(δικτιῶνος) ιγ΄

Die (80) × (56)mm; brick 32-40 mm thick (fig. D).
Six examples; 920*, 937*, 1054*, 1059.

E18. $\begin{array}{c} \Gamma \\ \Pi \quad \Upsilon E \quad I \\ T \quad P \quad N \\ E \end{array}$

+ Πέτρο(ου) υ΄ ἐν(δικτιῶνος) ιγ΄

Die 84 × 63 mm; brick 35-50 mm thick, 420 (fig. D).
Seventeen examples; 43, 165, 833*, 912*, 924, 1000*, 1001*, 1005*, 1380*.

E19. $\begin{array}{c|c} \Pi & E \\ \hline T & P_X \end{array}$ $\begin{array}{c} \Gamma \\ I \\ N \\ E \end{array}$

+Πέτρο(ου) χ' ἐν(δικτιῶνος) ιγ'

Die (90) × 63 mm; brick 30-40 mm thick (fig. D).
Eleven examples; 515, 893, 898, 991, 1000*, 1001* (three), 1005*, 1010, 1120* pier.

E20. $\begin{array}{c|c} \Pi & E \\ \hline T & P \end{array}$

+Πέτρο(ου) [ἐν(δικτιῶνος). .]

Die (83) × (75) mm; brick 45 mm thick (fig. D).
Two examples; 158.

E14-20. Thirteen examples; 725*, 837*, 924 (two), 1005*, 1058 (fig. D).

E21. $\begin{array}{c|c} \Pi & E \\ \hline T & P \end{array}$ $\begin{array}{c} I \\ N \\ E \end{array}$

+Πέτρο(ου) ἐν(δικτιῶνος) ι[.]'

Die (87) × 61 mm; brick 30-45 mm (fig. D).
Three examples; 724, 921*, 1136.

E22. $\begin{array}{c|c} \overline{PT} & \overline{EP} \\ \hline BI & NE \end{array}$

+Πέτρο(ου)
ἐν(δικτιῶνος) ιβ'

Die 96 × 75 mm; brick 36 mm thick (fig. D).
Three examples; 851*, 1072.

E1-22. 224 examples; 32*, 55*, 61 (three), 94 (three), 159 (two), 163*, 164, 165 (five), 172, 217, 252, 272 (two), 484 (two), 519, 540, 642, 667, 671, 674, 692, 700* (two), 713* (two), 720, 725*, 746*, 828, 833* (four), 837*, 850, 853, 859 (four), 867 (seven), 874*, 878, 898, 906, 907, 908 (two), 909* (two), 920* (eleven), 921* (two), 924 (eight), 927*, 933, 950, 953, 962*, 977* (five), 989, 991, 992, 1000*, 1003, 1005* (three), 1009*, 1010 (twelve), 1015* (three), 1038, 1047* (four), 1059 (eighteen), 1075*, 1077, 1081* (eight), 1100, 1108, 1109* (eight), 1111 (four), 1121* (eleven), 1122, 1129, 1135, 1144* (two), 1146 (two), 1159*, 1165* (two), 1255*, 1259*, 1292, 1297*, 1306 (two), 1345 (four), 1346, 1348A (two), 1362* (nine), 1380* (two), 1381 (seven).

F1. ΦΚ

Φκ[-

Die (39) × 41 mm; tile 17 mm thick (fig. D).
Two examples; 781, 871*.

F2. +ΛΕ +

+Λε. . . +

Die (133) × 26 mm; tile 17-22 mm thick (fig. D).
One example; 852.

F3. ΛΕ

-]Λε

Die (87) × 42 mm; tile 21-25 mm thick (fig. D).
One example; 1068*.

Discussion

SECTION I. BRICKSTAMPS FOUND *in situ*

1. Debris of barrel-vault fallen into corridor in sub-structure (MN/10-11, levels 131, 140): A30, C1 (two), D6 (sixteen), D7 (seven), D8 (two), D6-8 (twenty-five), D9 (thirteen), D10 (two).
2. Impressions of brickstamps in mortar make-up of brick floor (bb/16, level between 1118* and 1119*); A33, D11.
3. North aisle, bricks from demolished wall: B10 (nine), B12 (twelve), C18.
4. Wall *in situ*, N end (bb/15, level 1121*): B14, C12 (sixteen), C16, C19 (seven); twenty-five stamped bricks, twenty-four unstamped bricks.

5. Wall *in situ*, S end (bb/16, level 1121*): E19, E1-22 (eleven); twelve stamped bricks, four unstamped bricks; seven courses dismantled; mortar beds 70 mm thick.
6. Fallen pier and associated debris (eleven bricks found *in situ*) (Y/18-19, level 1081*): E2, E3 (two), E5, E1-6, E10, E11, E1-22 (eight): eleven stamped bricks, thirty-seven unstamped bricks; fourteen courses dismantled; mortar beds 60 mm thick.
7. Debris of fallen pier (bWX/16-18, levels 920*, 924, 1015): A26 (five), C5, C6, C7, C12, C13 (two), C14 (five), C13-15 (three), C21, D2, E2, E1-6 (two), E15 (two), E14-15, E17, E18, E14-20 (two), E1-22 (twenty-one).

8. Collapsed staircase vault (UV/17-18): A1 (twenty-eight), A12 (nine), B28 (three).
9. Southern pilaster against west church wall for staircase vault (Atrium TU/18-19): A12.

The total numbers of stamped and unstamped bricks in contexts where the ratio could be determined were 88 stamped bricks and 101 unstamped bricks. It would thus appear likely that in the case of bricks used on this site every other brick would have been stamped, but the figures upon which this conclusion is based are admittedly rather few. It seems to have been normal practice to lay the bricks with the stamp on the underside: of the stamped bricks found in section I, groups 2, 5, 6, and 9, 32 were lying with the stamp on the underside, and only 3 with the stamp on the upper side.

Some tentative conclusions concerning the cross-relationships in the building of bricks bearing various groups of stamps may be drawn from the information above. Brickstamps in section I, group 1 do not appear in Section I, groups 2 to 9. It would appear that these stamps belong to bricks which tended to be used in substructures and foundations, which conclusion is borne out by the analysis of contexts yielding brickstamps of more than one type (section II, below). Features classified as "walls" (I, 3 and 4) consist almost entirely of three groups of stamps (B9-23 [12], C12 [16], C19 [17]). These may be categorised as brickstamps appearing at a comparatively low level in the building. Section I, groups 5 to 8 comprise piers that fell from a high level in the building. In the bricks of these piers there is again a notable degree of consistency, 88 percent of the bricks bearing stamps of types C13-15 and E1-22. If the resolution proposed in the catalogue for the monogram of C13-15 is correct, all these bricks carry the name Πέτρον.

SECTION II. CONTEXTS PRODUCING BRICKSTAMPS OF MORE THAN ONE TYPE

Totals of three or less are omitted unless found *in situ*.

1. Substructure: levels 131, 138, 140, 143: A30, C1 (2), D6-10 (68).
2. Superstructure: levels 32*, 61, 86, 87*, 94, 158, 159, 165, 181, 233, 252, 272, 434, 484, 499, 600, 642, 655, 667, 674, 692, 700*, 702*, 713*, 720, 724, 725*, 729*, 733, 736, 738, 745*, 782, 785*, 828, 830*, 831*, 833*, 837*, 844*, 851*, 853, 859, 867, 874*, 898, 906, 909*, 912*, 920*, 924, 977*, 991, 994*, 1000*, 1001*, 1003, 1005*, 1010, 1015*, 1029*, 1038, 1058, 1059, 1072, 1074, 1081*, 1092*, 1109*, 1111, 1120* floor, 1120 pier*, 1120 wall*,

1159*, 1165*, 1237*, 1252*, 1298, 1330A, 1345, 1362*, 1380*, 1381, staircase vault, north aisle wall, south pilaster: A1 (28), A8-9 (14), A12 (13), A26-28/C9-10 (31), A32 (9), B6-7 (9), B8/C2-6 (31), B9-22 (71), B25/C7-8 (16), B28 (3), B34 (5), C11 (6), C12 (17), C13-15 (92), C18 (31), C19 (8), D2 (30), D11 (11), D12 (6), E1-22 (285): 84 contexts, 722 brickstamps of 69 types.

Bricks from the upper parts of the building were naturally widely scattered and mixed. It was not, therefore, possible to determine clearly defined context groups for the superstructure. Despite this reservation, some indicative features may be noted. Bricks in section II, groups 1 and 2 are mutually exclusive in their distribution, and there is a clear correlation in terms of distribution between brickstamps bearing the same name. This confirms the simple view that bricks bearing different stamps with the same name are likely to have originated from the same brickyard and, having been delivered in batches, tended to be used in clusters through the building. The most striking instance of this is the twenty-eight examples of type A1 which were all found *in situ* used in the same fallen vault. It was suggested in section I that there may have been a relationship between types C13-15 and E1-22: 28 of the contexts of section II, group 2 contained examples of both types, and in the case of 9 contexts (252, 720, 724, 830*, 837*, 844, 867, 906, 1038) brickstamp finds were exclusively of these groups. It was also noted in section I that finds of brickstamps C13-15 and E1-22 *in situ* suggested that they may have been the stamps of bricks used at a high level in the building. This suggestion is strengthened by the fact that most brickstamps of these types were recovered on very small fragments of brick, which may well have been shattered as a result of collapse from a great height. The large number of bricks that can be assigned to C13-15 (43) and E1-22 (225) only in very general terms is itself a result of the fact that these bricks were often recovered as smithereens. These fragments also tended to be thinner than many of the bricks that were presumably used at lower levels. Where whole bricks of these groups were recovered, and could be compared with examples from lower levels, especially those of the group D6-10, it could be seen that the latter were of a more uniform thickness, whilst the bricks from high levels, although of the same overall dimensions and thickness at the edges, were thinner at the centre. The most obvious difference in the samples from Sarāḥane was that of weight: the bricks of the C13-15 and E1-22 types were noticeably lighter. It may thus be that the brickyard which used

the name Πέτρον on its bricks had access to less dense clays than its competitors, and specialised in the production of bricks for vaulting. Contexts with high densities of bricks of these groups are the most likely to contain remains of the dome, if the church was equipped with such.¹⁸

The analysis of common contexts does thus lend weight to the assumption that brickstamps bearing the same name can be treated as groups, and on this basis the relative frequencies of groups of brickstamps can be computed (see Table 1). It is clear from this analysis that some names are overwhelmingly preponderant: over half of the stamped bricks in fact carry one of only two names. When this observation is combined with the fact that bricks bearing the same name have a clear tendency to turn up in the same contexts, irrespective of the shape of the die, it becomes clear that the most straightforward explanation of the names appearing in the brickstamps is also the most likely. they must be the names of officials in, or owners of, brickyards: it would seem inherently improbable that donors would pay for so many different dies to be cast (D5, at least, appears to be the impression of a metal stamp), and it is difficult to believe that all the names recorded are of hagiographical, or even vaguely ecclesiastical, significance. Since the vast majority of the brickstamps from Saraçhane must be nearly contemporary, and not a single example can be resolved into Justin or Justinian, any suggestion, following Dorigny,¹⁹ that the names can have imperial connotations is patently untenable.

SECTION III. INDICTIONS (see Table 2)

If the indiction numbers recorded are resolved into a sequence of rising frequency, a clear pattern can be discerned. The sequence commences with Z' and runs through to Δ'. Notably missing are E' and S'. There is a very obvious peak in the section IB'-Δ'. If these indiction numbers are to be explained as year indicators, the years from 519/20 to 525/6 must be indicated. This confirms very accurately the suggestion that the church was built during the period 524 to 527, and the complete absence of indiction E' (526/7) presumably indicates that by that stage the basic structure of the church was complete and the decoration and furnishing of the interior were being carried out. The explanation of the indiction numbers as being year indicators is the simplest available. The alternative would be to suggest that they might be batch numbers, but there is some evidence to suggest that this alternative explanation is unnecessary. A group of stamps (E2, E3, E4, E5, E6, E16, E17, E18, E19) carries an extra letter which cannot be explained grammatically, or as an indiction number. The letters that appear (Δ, K, Λ, N, O, Y, X) are not consistent with the letter-numerals used in the indiction system, and in four cases (E16, E17, E18, E19) a normal indiction is also recorded. These letters are surely much more likely to have served as batch indicators.

THE CATALOGUES

Table 1. Frequencies of Brickstamp Groups

Brickstamps	No. of bricks	% of whole	Total bricks	Total %
^a A22-23, E1-22	412	34.13	412	34.13
D6-10, D14	116	9.61	528	43.74
^a C13-15	115	9.53	643	53.27
B9-23, D5	113	9.36	756	62.63
A26-28, B32, C9-10	47	3.89	803	66.52
D2	47	3.89	850	70.41
A13, B8, C2-6	43	3.56	893	73.97
C18	38	3.14	931	77.11
B25-27, C7-8, D11	37	3.06	968	80.17
A8-9	34	2.81	1002	82.98
A1-2	29	2.49	1031	85.47
C12	18	1.49	1049	86.96
A12	16	1.32	1065	88.28
D12	15	1.24	1080	89.52
A32	12	0.99	1092	90.51
B6-7	11	0.91	1103	91.42
A4	10	0.83	1113	92.25
C19	8	0.66	1121	93.91
C11	7	0.58	1128	93.49
A15, B24	6	0.50	1134	93.99
C17	6	0.50	1140	94.49
A30, A33	5	0.41	1145	94.90
B3	5	0.41	1150	95.31
B34	5	0.41	1155	95.72
A3	3	0.25	1158	95.87
A6	3	0.25	1161	96.22
A14	3	0.25	1164	96.47
B2,C1	3	0.25	1167	96.72
B28	3	0.25	1170	96.97
A7	2	0.17	1172	97.14
B1	2	0.17	1174	97.31
B5	2	0.17	1176	97.48
B33	2	0.17	1178	97.69
C20	2	0.17	1180	97.82
C22	2	0.17	1182	97.99
D13	2	0.17	1184	98.16
A5	1	0.08	1185	98.24
A10	1	0.08	1186	98.32
A11	1	0.08	1187	98.40
A16	1	0.08	1188	98.48
A17	1	0.08	1189	98.56
A18	1	0.08	1190	98.64
A19	1	0.08	1191	98.72
A20	1	0.08	1192	98.80
A21	1	0.08	1193	98.88
A24	1	0.08	1194	98.96
A25	1	0.08	1195	99.04
A29	1	0.08	1196	99.12
A31	1	0.08	1197	99.20

BRICKSTAMPS

Brickstamps	No. of bricks	% of whole	Total bricks	Total &
B4	1	0.08	1198	99.28
B29	1	0.08	1199	99.36
B30	1	0.08	1200	99.44
B31	1	0.08	1201	99.52
C16	1	0.08	1202	99.60
C21	1	0.08	1203	99.68
D1	1	0.08	1204	99.76
D3	1	0.08	1205	99.84
D4	1	0.08	1206	99.92
D14	1	0.08	1207	100.00
^a A22-23, C13-15, E1-22	526	43.58		

Table 2. Analysis of Recorded Indictions

Indiction Nos.	Total	%
A' A4 (10), A27, D3	12	2.8
B' A5, A13, B27, C10(2), D14	6	1.4
Γ' A6, (3), A15, A18, D4, D5(6), D6(31), D7(26), D8(3), D6-8(3), D9(17), D10(3), D11(7), D13(2)	104	24.3
Δ' A3(3), A10, A29, A30, B22(41), D2(47)	94	22.0
E'	0	0.0
S'	0	0.0
Z' B33(2)	2	0.5
H' A14(3), A17, A24, C9(3), C11(7)	15	3.5
Θ' A7(2), B7(9)	11	2.6
I' A11, A25	2	0.5
IA' A2, A26(2), D12(15)	18	4.2
IB' A16, B3(5), B27, C10(2), E9(4), E10(8), E11(8), E10-11(9), E22(3)	41	9.5
ΙΓ' B34(5), E13(13), E14(6), E15(21), E14-15(4), E16(18), E17(6), E18(17), E19(11)	101	23.6
ΙΔ' A8(3), A12(16), B28(3)	22	5.1
Total	428	100.0

Note: Sequential totals: Indictions E' to IA', 48 (11.21%); indictions IB' to Δ', 380 (88.79%).

Chapter Eleven

THE SMALL FINDS

M. V. GILL

SMALL FINDS were excavated at Saraçhane in most levels from the late Roman period to the early twentieth century; some were complete objects, many were fragmentary, or components of which the more perishable parts had entirely disappeared. While some items obviously belonged to the church fittings, others came from domestic contexts, or were personal accessories lost by the living or buried with the dead.

In this catalogue, the small finds have been grouped roughly according to function, where this can be ascertained. Where it is not apparent, they have been placed in miscellaneous categories with objects of similar shape and material, which might provide a clue to their original purpose.

In most sections, all the material excavated has been listed, but from others there are omissions. The latter include many minute pieces of bronze and corroded bits of iron that were in too fragmentary a state to allow identification of the original objects. There were also such large numbers of nails and horse shoes that in these sections it seemed more desirable to make a selection of a few typical specimens. Some modern material (such as a mason's plate, clock pendulum, service button, cap badge, brass tap, and cigarette holder) has been omitted; but in other cases nineteenth-century objects have been included where they represent a continuation of an earlier type. Fabrics have not been analysed, visual criteria only being used to distinguish between bone and ivory, and between the metal alloys.

Unless otherwise stated, the measurements given in the catalogue are the preserved dimensions. Now and then, for example with the diameters of the glass bracelets, the original sizes have been estimated.

The condition of an object is only summarily described. Nearly every item has suffered damage of some sort, but when the condition is not stated the item may be presumed substantially intact. With the metalwork, both bronze and iron articles were often badly corroded. In some cases the cleaning process in

the Conservation Department at Istanbul Archaeological Museum revealed details previously invisible, but once or twice the finds were so corroded that on cleaning, parts disintegrated altogether. For this reason there are occasionally discrepancies between the textual descriptions and the illustrations, some photographs having been taken before and others after conservation.

Of comparative material, little has been derived from clearly datable contexts; the only site from which large numbers of small finds similar to those from Saraçhane have been excavated and published is Corinth. Appropriate references therefore are made to G. R. Davidson, *Corinth Volume XII: The Minor Objects* (1952).

BONE AND IVORY COMPONENTS

Knobs, struts, etc.

Most of the bone and ivory elements included in this section are of doubtful function. Some of the fully moulded rungs may have served a structural as well as an ornamental purpose in furniture, while the moulded half-columns etc. were probably mere decorative adjuncts. It remains uncertain to what articles they originally belonged; the bone cylinders (nos. 4-7) may even have come from walking canes rather than furniture.

1. F249, Mus M7913. Bone knob. Diam. 2.7 cm. Ht. 1.8 cm.

Turned hemisphere; medullary cavity forming vertical perforation, with circular cutting at top and heptagonal opening at base.

From level 796 (B).

2. F1675, Mus M 7943. Bone cylinder. Diam. 3 cm. L. 2.1 cm.

Turned; medullary cavity through centre roughly trimmed, ends recessed.

From level 1218* (m7 [+ 10]).

3. F1661. Bone strut (pl. 282). Diam. 2.2 cm. L. 5.9 cm.

Ends broken.

Perforated lengthwise by medullary cavity. Turned mouldings and incised decoration: drum-shaped section with double lines along each edge, linked by groups of four or five diagonal lines in alternate directions; rounded moulding with double lines at each end and two rows of dot-and-double-circles linked by zigzag; four moulded rings; fragment of rounded moulding with circle and zigzag pattern as above. Traces of original red staining. Possibly part of an ornamental stick rather than a furniture element.

From level 1371* (10-11 + m12).

4. F1919, Mus 71.183. Bone cylinder. Diam. 2.1 cm. L. 2.5 cm.

Turned, slightly tapering; perforated lengthwise by medullary cavity. Decorated with groups of incised lines.

From level 1423 (12 + m16).

5. F714, Mus 7951. Bone cylinder. Diam. 1.9 cm. L. 1.8 cm.

Turned, slightly tapering with rabbet at one end; medullary cavity recessed at same end. Decorated with incised rings.

From level 1080 (18 + Mod).

6. F759, Mus 7957. Bone cylinder. Diam. 2.2 cm. L. 4 cm.

Turned, slightly tapering; medullary cavity lengthwise, recessed at one end. Decorated with incised rings.

From level 492 (m19+).

7. F1928, Mus 71.182. Bone cylinder. Diam. 1.8 cm. L. 2.7 cm.

Turned, slightly tapering; perforated lengthwise by medullary cavity. Two incised rings decorating wider end.

From level 1428 (l19+).

8. F888, Mus 7898. Bone cylinder. Diam. 1.3 cm. L. 3.2 cm.

Turned; perforated lengthwise by medullary cavity, a second perforation through diameter. Two incised rings at one end.

From level 1299 (l19/e20).

9. F1798. Bone cylinder. Diam. 1.2 cm. L. 1.2 cm.

One end broken.

Turned, slightly tapering, perforated lengthwise by

medullary cavity. Decorated with three deeply incised rings and band of zigzags in relief.

From level 273 (e20).

10. F936, Mus 8002. Bone knob. Diam. 0.9 cm. Ht. 1.7 cm.

Hollow drum-shaped element with solid knob. Perhaps furniture finial or foot of casket.

From level 1321 (l17/e18).

11. F464, Mus 7972. Bone strut (pl. 283). Diam. 1.1 cm. L. 6.5 cm.

Perforated lengthwise by medullary cavity; one end tapered by rough carving for insertion into another unit. Main part decorated with turned mouldings.

From level 563* (m7, 7/8).

12. F1777. Ivory rung (pl. 284). Diam. 1.7 cm. L. 6.8 cm.

Cracked; just under half diameter missing.

Turned mouldings, consisting of a globular element in centre with concave-conical and disc elements either side, separated by astragals. A grooved peg at each end.

From level 607*(8).

13. F1531, Mus 7937. Bone rung. Diam. 2.8 cm. L. 5.9 cm.

Ends broken; just under half diameter missing.

Medullary cavity lengthwise. Turned mouldings, consisting of globular element between astragals, tapering element at one end.

From level 1218*(m7 [+10]).

14. F1176, Mus 71.70. Bone rung (pl. 285). Diam. 1 cm. L. 2.6 cm.

End broken.

Turned mouldings consisting of a globular element between concave-conical elements and astragals with a disc at the more complete end. Side slightly flattened.

From level 1246*(l8/e9).

15. F1576. Bone rung (pl. 286). Diam. 1.2 cm. L. 6 cm.

Ends broken.

Turned shaft with entasis; moulding at one end consisting of a disc between astragals, and a concave-conical element. Side slightly flattened.

From level 1285*(l10).

16. F193, Mus 7968. Bone rung (pl. 287). Diam. 0.9 cm. L. 5.9 cm.

Ends broken.

Turned cylindrical shaft, with three incised rings at each end; remains of peg at one end. Possibly a handle. Cf. *Corinth*, no. 1423.
From level 898 (e13 + 16/17 [+ Mod]).

17. F189, Mus 7899. Bone rung. Diam. 1.1 cm. L. 4.9 cm.
With turned mouldings and peg at either end.
From level 892 (16-17 + Mod).

18. F414, Mus 7958. Bone corner-column (pl. 288).
Diam. 2.2 cm. Ht. 5 cm.
Ends broken.
Turned shaft with multiple moulding at top. Medullary cavity forming hollow at back. Probably ornamental element attached to corner of piece of furniture.
From level 292* (6 [+ 12-13]).

19. F807, Mus 7887. Bone half-column (pl. 289).
Diam. 2.7 cm. L. 8.7 cm.
Ends broken.
Turned shaft with entasis; moulding at one end consisting of a disc between astragals, a concave-conical element and further fillets. Medullary cavity forming hollow at back; two triangular tenons for vertical or horizontal attachment.
From level 558* (7 [+ 8]).

20. F1577. Bone half-column (pl. 290). Diam. 2.7 cm. Ht. 5.8 cm.
Lower end broken.
Turned shaft with deep band of mouldings; acanthus leaf capital crudely carved. Medullary cavity forming hollow at back. Two perforations for attachment pins.
From level 1285* (110).

Beading.

Beadings (nos. 21-24) were evidently turned on a lathe as shafts of spherules (or of more complex mouldings), these being sawn longitudinally to produce the strips of hemispherical beads. A tiny indentation where the end of the shaft was held in rotating is sometimes visible, as well as saw marks on the backs of the strips.

21. F750, Mus 7876. Ivory beading (pl. 291). Diam. 1.1 cm. L. 5.8 cm.
Complete strip sawn at both ends, consisting of five and a half hemispherical beads.
From level 647* (7).

22. F756, Mus 7949. Ivory beading. Diam. 1.2 cm. L. 2.1 cm.

One end broken.

Fragment consisting of two hemispherical beads. Indentation at undamaged end, where ivory held in lathe.
From level 647* (7).

23. F757, Mus 7950. Ivory beading. Diam. 1.2 cm. L. 2.2 cm.
Broken at both ends.
Fragment consisting of two hemispherical beads.
From level 647* (7).

24. F1034, Mus 7871. Ivory beading (pl. 292). Diam. 1.2 cm. L. 7.2 cm.
One end broken.
Double-bead-and-reel beading, consisting of four groups of alternating pairs of disc-shaped beads and bi-conical reels. Indentation at undamaged end. Back scored, with traces of red staining.
From level 1240* (e11).

25. F808, Mus 7973. Bone moulding. W. 0.7 cm. L. 6.1 cm.
Strip of almost square section; one face curved and decorated with diagonal incisions. Ends mitred.
Byzantine.
Provenance unrecorded.

26. F148, Mus 7866. Bone moulding (pl. 293). W. 0.7 cm L. 5.2 cm.
Strip of quarter-circular section; curved face carved with diagonal incisions. Ends mitred.
From level 874* (10 - 112/e13).

27. F29, Mus 7984. Bone moulding. W. 0.7 cm. L. 8.4 cm.
Bar of roughly rectangular section with two adjacent sides polished and the corner between these sides rounded. Ends partially mitred.
From level 206 (116/e17).

28. F52, Mus 7983. Bone moulding. W. 1.15 cm. L. 12.5 cm.
One end broken.
Strip of semicircular section; triangular nick at one side (for insertion of a second bar at right angles). Undamaged end mitred.
From level 229 (1/217-18 [+ Mod]).

29. F751, Mus 7994. Ivory strip. W. 1.2 cm. L. 6.9 cm.
One side and end damaged.
Bar of trapezoid section with relief decoration consisting of a moulded border and projections of varying width. Perforation for attachment pin. Back scored.
From level 647* (7).

30. F341, Mus 7990. Ivory strip (pl. 294). Ht. 2.4 cm. L. 8.3 cm.

Trapezium-shaped plaque, with simple moulding. Back scored; upper and lower edges roughened with roulette.

From level 548* (8, e10).

31. F1994. Ivory panel. Ht. 2.7 cm. L. 2 cm.

Broken on three sides.

Thin flat panel, originally rectangular with heavy moulding along one edge. Perforation for attachment pin.

From level 1319* (2/12+).

Plaques.

Ivory and bone decorative plaques as well as beading and other moulded pieces were probably inlaid or applied as panels in wooden boxes or other items of furniture. Occasionally a perforation indicates that one was secured with pins, but the majority seem to have been glued. Those of ivory usually have their backs scored to assist adhesion, while bone plaques are sometimes naturally rough with cancellous tissue and sometimes deliberately roughened by scoring.

32. F1934, Mus 71.175 Bone plaque (fig. A, pl. 295). 5.1 cm × 5.3 cm.

Square panel, with single series of concentric circles, moulded on lathe. Back smooth.

Byzantine.

From level 1205 (16-17[+]).

33. F842, Mus 7930. Bone plaque (fig. A). 4.1 × 4.7 cm.

One side and opposite corner missing.

Square panel, as above no. 32. Back rough with cancellous tissue and crude cuts.

From level 564* (m7).

34. F809, Mus 7897. Bone plaque (fig. A). 4.7 × 2.9 cm.

Almost half missing.

Square panel, as above no. 32. Back rough with cancellous tissue.

From level 558* (7 [+8]).

35. F802, Mus 7857. Bone plaque (fig. A). 5 × 5.1 cm.

Large portions missing from two corners.

Square panel, as above no. 32. Back scored.

From level 563* (m7, 7/8).

36. F805, Mus 7932. Bone plaque (fig. A). 3.6 × 3.8 cm.

Just over a quarter preserved.

Square panel, as above no. 32. Back partly rough with cancellous tissue.

From level 558* (7 [+8]).

37. F754, Mus 7931. Bone plaque (fig. A). 6.3 × 4.2 cm.

Almost half missing.

Square panel, as above no. 32. Back scored.

From level 611* (8).

38. F713, Mus 7933. Bone plaque (fig. A). W. 6.5 cm.

Large portion missing from sides.

Panel probably originally square, as above no. 32. Back scored.

From level 609* (8).

39. F712, Mus 7885. Bone plaque (fig. A, pl. 296). 5.1 × 7.7 cm.

Part of one angle and side missing.

Triangular panel with one large series of concentric circles moulded on lathe, as above no. 32, and groups of small dot-and-double-circles drilled in the angles. Two perforations (originally three) for attachment. Back lightly scored.

From level 606* (8).

40. F851, Mus 7996. Bone plaque (pl. 297). W. 1.25 cm. L. 1 cm.

Ends broken.

Narrow strip with remains of two drilled dot-and-double-circles. Back smooth. Cf. *Corinth*, no. 956.

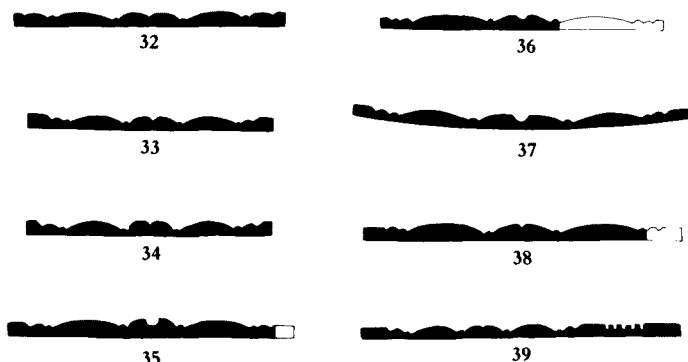
From level 564* (m7).

41. F1613. Bone plaque (pl. 298). W 1.6 cm. L. 4.5 cm. Ends broken.

Narrow strip with row of three drilled dot-and-double-circles, linked by diagonal incisions to form a running spiral. Back rough with cancellous tissue.

From level 1285* (110)

FIGURE A. Bone Plaques (scale 2:3)



42. F340, Mus 7867. Bone plaque (pl. 299). W. 4.6 cm. L. 4.6 cm.

One end missing.

Rectangular panel with four columns of drilled hole-and-circles, the outer rows divided from the inner by incised lines. Two perforations at undamaged end. Back smooth.

From level 601* (e10).

43. F135, Mus 7896. Bone plaque (pl. 300). W. 2.8 cm. L. 5.2 cm.

One corner missing.

Rectangular panel with six drilled hole-and-circles. Two perforations at one end. Back smooth. Cf. *Corinth*, no. 954.

From level 867 (12 + [+ 16 +]).

44. F598, Mus 8007, Bone plaque (pl. 301). W. 1.9 cm. L. 3.5 cm.

Opposite corner, end and side missing.

Rectangular panel with two rows of drilled hole-and-circles either side of an incised line; a second line parallel to the edge at one end. Remains of one attachment hole. Back rough with cancellous tissue.

Provenance unrecorded.

45. F316, Mus 7905. Bone plaque. Ht. 2.7 cm. L. 4.2 cm.

Semicircular panel with fan pattern: an incised line parallel to the edge containing five petal-shaped radial cuts, deeply carved and separated at circumference by triangular incisions. Back rough with cancellous tissue. Cf. *Corinth*, no. 947 (square plaque).

From level 536* (e10 [+ 11/e12]).

46. F1614. Bone plaque. Ht. 2.2 cm. L. 4.6 cm.

Edge slightly damaged.

Semicircular with fan pattern, as above no. 45; six radial cuts. Back roughened with cancellous tissue.

From level 1262* (e10).

47. F223, Mus 7906. Bone plaque (pl. 302). Ht. 2.1 cm. L. 4.4 cm.

Semicircular with fan pattern, as above no. 45; seven radial cuts. Back rough with cancellous tissue.

From level 719 (B + T – Mod).

48. F140, Mus 7861. Bone plaque. Ht. 2.5 cm. L. 4.8 cm.

Semicircular, as above no. 47.

From level 874* (10 – 112/e13).

49. F149, Mus 7858. Bone plaque. Ht. 2.9 cm. L. 4.8 cm.

Semicircular, as above no. 47.

From level 874* (10 – 112/e13).

50. F579, Mus 7862. Bone plaque (pl. 303). Ht. 2.3 cm. L. 3 cm.

Trapezium-shaped panel with decoration in flat relief, consisting of half an oval element and an ivy leaf with scrolling tendril between flat moulded borders. Back scored. End mitred to fit corner.

From level 647* (7).

51. F353, Mus 7993. Bone plaque. Ht. 0.9 cm. L. 8.4 cm.

Side and ends broken.

Fragment of rectangular panel with raised border containing groups of incised lines, perhaps part of plant motif. Back lightly scored.

Byzantine.

Provenance unrecorded.

52. F1528, Mus 7870. Bone plaque. Ht. 2.3 cm. L. 5.8 cm.

Rectangular panel with S-curved stem terminating in bud-and-leaf elements, carved in flat relief between flat moulded borders. Back rough with cancellous tissue. Byzantine.

Provenance unrecorded.

53. F1668. Bone plaque (pl. 304). Ht. 2.5 cm. L. 4.6 cm.

One end missing.

Rectangular panel with flat moulded border and hatched background to motif: scrolling vine with bunch of grapes, tendrils, and stylized foliage, carved in flat relief. Back rough with cancellous tissue.

From level 1271* (m(?)11).

54. F220, Mus 7864. Ivory plaque (pl. 305). Ht. 5 cm. L. 11.2 cm.

One corner, side and bottom missing.

Panel with moulded border above, and decoration carved in relief: arcade of one and a half arches, containing palmate leaves; trifoliate sprays in spandrels. Back scored.

From level 1001* (3/212).

55. F1829. Ivory plaque (pl. 306). Ht. 2 cm. L. 3.8 cm.

Fragment, badly discoloured perhaps by fire.

Panel with flat moulded border and part of a four-petalled rosette carved in relief. Back scored.

From level 87* (112 – e13).

56. F54, Mus 7884. Ivory fragment (pl. 307). Ht. 2.7 cm. W. 3 cm.

Discoloured perhaps by fire.

Four-petalled rosette carved in relief. Back scored.

Probably part of no. 55.

From level 94 (B +15 +16).

57. F1665. Ivory plaque (pl. 308). Ht. 3.1 cm. L. 4.3 cm.

Edges broken.

Fragment carved in relief with mass of hemispheres in grapelike formation. Back scored.

From level 1181* (ml12).

58. F954, Mus 7963. Ivory plaque (pl. 309). Ht. 3.8 cm. W. 3.3 cm.

Broken across centre.

Rectangular panel with flat moulded border; frontal bust of nimbed, bearded bishop holding book, carved in relief. Traces of gold leaf on nimbus and book. Frame pierced at top by suspension loop of bronze wire, suggesting probable reuse of casket panel as an icon. Back smooth. Cf. *DOP* 22, p. 199, fig. 7.

From level 845* ($\frac{1}{2}$ 11).

59. F64, Mus 7889. Ivory plaque (pl. 310). Ht. 8.1 cm. W. 4.6 cm.

One side broken.

Fragment carved in relief with broad folds of drapery. Edges sawn, one with a diagonal incision; back curved and scored. This piece may have been mounted on a wooden core and formed part of a large panel in high relief (or possibly of a statuette) composed of several pieces of ivory. If the drapery belonged to a standing figure, the shape and scale of the folds suggests that figure to have been at least half a meter in height.

From level 694* (10-11 + e12).

60. F1, Mus 7863. Bone plaque (pl. 311). Ht. 5.8 cm.

Feet of archer and lower curve of bow missing.

Edge of plaque forming outline of kneeling archer with drawn bow raised; details incised. Figure, facing left, appears to be wearing a tunic and possibly breeches and hooded headgear. Back smooth.

From level 33* (R +10-11).

61. F352, Mus 7895. Bone plaque (pl. 312). Ht. 4.8 cm.

Triangular panel with motif crudely incised: bird standing to right, wing folded, head raised to fill complete field. Back rough with cancellous tissue.

From level 536* (e10 [+11/e12]).

62. F1527, Mus 7859. Bone plaque (pl. 313). Ht. 3.8 cm.

Trapezium-shaped panel with flat moulded border and hatched background to motif: bird standing to right in flat relief, details incised. Back rough with cancellous tissue. Cf. *Corinth* no. 948.

From level 1237* ($-\frac{1}{2}$ 12).

63. F351, Mus 7865. Bone plaque (pl. 314). Ht. 3 cm. Half containing hindquarters of animal missing.

Trapezium-shaped panel with flat moulded border and hatched background to motif: dog crouching to left in flat relief, details incised. Perforation through jaw of dog. Back rough with cancellous tissue.

From level 536* (e10 [+11/e12]).

64. F168, Mus 7901. Bone plaque (pl. 315). 3.7 × 3.6 cm.

Square inlay with pierced pattern composed of linked curves and volutes, which produce fleurs-de-lis in corners. Front slightly more finished than back.

From level 702* (10 + e12).

65. F1914, Mus 71.180. Bone plaque (pl. 316). Ht. 5.2 cm.

Inlay shaped like card spade. Smoother finish to front.

From level 797* (12).

66. F1666, Mus 7894. Bone plaque. L. 5.7 cm.

Both ends broken.

Fragment of shaped inlay with two opposing sides notched to form pairs of teeth. Smoother finish to front.

Narthex G unstratified.

67. F1985, Mus 71.176. Ivory plaque. L. 3.7 cm. W. 2.9 cm.

Rectangular panel deeply bevelled. Back scored, with incised inscription $\Phi\Xi$.

From level 602* (e10 +8 [+7]).

68. F124, Mus 7879. Ivory plaque. Ht. 3.9 cm. L. 4.8 cm.

Lower border and background to motif missing. Fragment of thin panel with motif carved in relief: step-pyramid outlined, containing semicircle. Back scored.

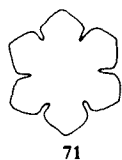
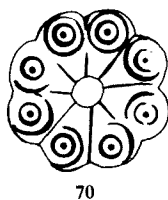
From level 904 ($\frac{1}{2}$ 17).

69. F133, Mus 7854. Ivory plaque. Ht. 4.1 cm. L. 5.3 cm.

Roughly elliptical with scalloped edge. Both faces smooth. Four bronze pins for attachment to item of furniture or to leather belt.

From level 991 (16/e17 [+17/18]).

FIGURE B. Mother-of-Pearl Inlays
(scale 2:3)



70. F1910, Mus 71.185. Mother-of-pearl rosette (fig. B). Diam. 3.2 cm.

Eight-lobed perforated disc, with incised lines dividing surface into petals, each with a dot-and-double-circle at end. Possibly for furniture inlay or perhaps part of a needlework tool (the decorative end of a reel-holder). From level 1406 (18).

71. Mother-of-pearl inlay (fig. B). Diam. 2.4 cm. Eight-petalled rosette, of type commonly inlaid in Turkish furniture. From level 1299 (I19/e20).

CONTAINERS

Bone pyxides.

A group of enigmatic bone tubes may originally have served as cosmetic containers, though similar small boxes from Corinth seem to have been used for tossing dice (cf. *Corinth*, p. 218, nos. 964-965). Their turned exteriors have simple mouldings beneath the lips; inside, the medullary cavities are crudely trimmed and the lower edge of each is recessed. The perforated lug on no. 72 confirms that the more elaborate moulding is at the top and the deeper interior recess at the bottom to receive a missing base. Unfortunately, among the numerous bone and ivory discs from Sarachane, there is not one that corresponds sufficiently to warrant the conjecture that it was a component of one of the surviving "boxes." Possibly bases were made of wood or some other perishable material, which would account for their total absence.

72. F967, Mus 7881. Bone pyxis (figs. C & D). Ht. 3.9 cm. Diam. 4.2 cm. Half missing.

Turned cylinder narrowing slightly towards mouth, with moulded lip and recess at base. Remains of horizontally and vertically perforated lug on shoulder and traces of horizontal perforation on opposite side.

Scratched decoration consisting of an arcaded band and four-petalled rosette within a diamond frame. The ground may originally have been stained to contrast with the white of the pattern. From level 1335* (8 + 11/12).

73. F850, Mus 7939. Bone pyxis (fig. C). Ht. 4.4 cm. Diam. 3.6 cm.

Just over half missing.

Turned cylinder with narrow moulding near top; bottom recessed. Perforation in shoulder repaired with ancient plug.

From level 564* (m7).

74. F270, Mus 7904. Bone pyxis (fig. C). Ht. 4.5 cm. Orig. diam. 3.7 cm.

Over half missing.

Turned cylinder with narrow moulding near top and incised line round base; bottom recessed.

From level 900 (11 [+R], -18+).

75. F966, Mus 7892. Bone pyxis (fig. C). Ht. 4 cm. Orig. diam. 4.3 cm.

Just over half missing.

FIGURE C. Bone Pyxides (scale 2:3)

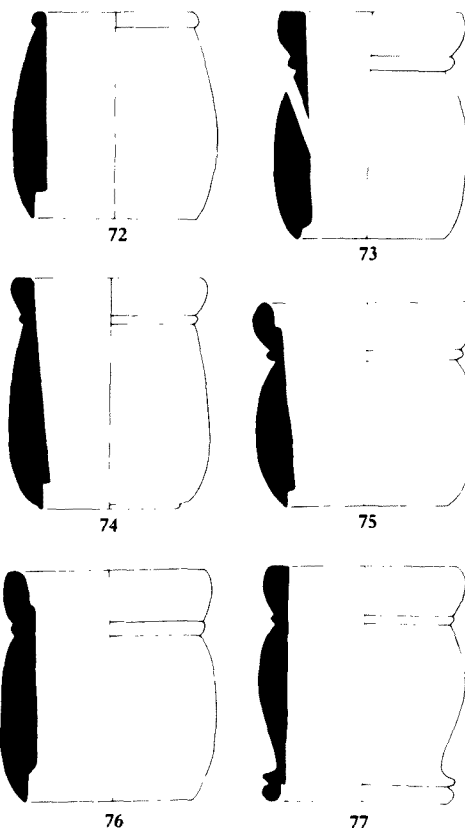
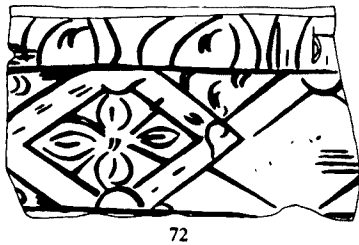


FIGURE D. Decoration
on Pyxis (scale 2:3)



Turned cylinder with narrow moulding near top; both ends recessed.

From level 1335* (8 + 11/12).

76. F67, Mus 7938. Bone pyxis (fig. C). Ht. 4.4 cm. Diam. 3.9 cm.

Just under half missing.

As above no. 75.

From level 694* (10-11 + e12).

77. F1991. Bone pyxis (fig. C). Ht. 4.6 cm.

Over half missing.

Turned cylinder with narrow moulding near top and at base; bottom recessed.

From level 1227* (m[?]12).

78. F1905, Mus 71.184. Bone lid. Ht. 1.4 cm. Diam. 1.4 cm.

Domed lid with flat-topped conical knob self-screwed; screw edge for fastening to missing container.

From level 1398 (l19 – e20).

Stone vessels.

79. F1800. White marble dish (fig. E). Orig. diam. 26 cm.

Eight fragments from rim of shallow dish; rim flat with narrow groove. Both faces slightly polished. Cf. no. 80.

From levels 388*, 449*, 564*, 609*, 1363* (m7 [+ 10], 8, -m11, ¾12).

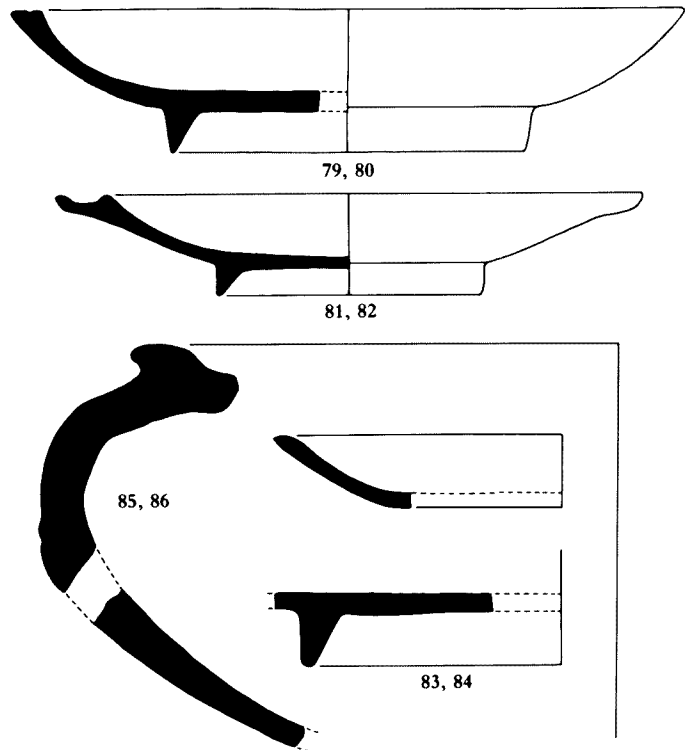
80. F1818. White marble dish (fig. E). Orig. diam. of foot 14 cm.

One fragment from flat center of dish with cylindrical foot. Inside of foot unpolished. Probably part of same dish as no. 79.

From level 449* (m7 [+ 10]).

81. F801. White marble dish (fig. E). Orig. diam. 22.5 cm.

FIGURE E. Stone Vessels (scale 1:3)



Five fragments from rim of shallow dish; rim flat with wide runnel. Front more highly polished than back. Cf. no. 82.

From levels 560*, 563*, 564* (m7).

82. F1819. White marble dish (fig. E). Diam. of foot 10.1 cm.

Two fragments from flat centre of dish with cylindrical foot. Probably part of same dish as no. 81.

From levels 449*, 564* (m7 [+ 10]).

83. F1820. White marble dish (fig. E). Orig. diam. 22 cm.

Two fragments from plain rim of shallow dish. Both faces polished.

From levels 388*, 564* (m7, ¾12).

84. F1821. White marble dish (fig. E). Orig. diam. of foot 20 cm.

Fragment from flat centre of dish with cylindrical foot. Inside of foot unpolished.

From level 1329* (l11/e12).

85. F1822. White alabaster bowl (fig. E) Orig. diam. 44 cm.

Three fragments from rim of bowl, one with part of a

triangular moulding, perhaps decoration at the base of a handle. Exterior only polished. Cf. no. 86.
From levels 1010, 1013* (*m*, $\frac{3}{4}12$).

86. F1823. White alabaster bowl (fig. E) Ht. 9.3 cm.
One fragment from lower part of vessel. Exterior polished slightly more than interior. Probably part of no. 85.
From level 1010 ($\frac{3}{4}12$).

87. F1826. Bowl of white marble, mottled with red. Ht. 5 cm.
One fragment, polished on outside.
From level 388* ($\frac{3}{4}12$).

88. F1975. White marble bowl. Ht. 3.2 cm. Orig. diam. ca. 32 cm.
One fragment from base of vessel with slight foot.
From level 237 (R + B [+19]).

89. F1958. White marble bowl. Ht. 6.1 cm.
One fragment from rim, consisting of a curving petal spout and part of a second petal. Upper curve of petal highly polished.
From level 900 (11 [+R], -18+).

90. F1825. Cream and white alabaster vase. Ht. 6.5 cm.
One fragment with vertical fluting.
From level 916 (-Mod).

91. F1824. Vase of highly coloured alabaster, banded red, grey, white, brown, and yellow. Ht. 4.4 cm. Orig. diam. 26 cm.
One fragment with both sides polished.
From level 716* (10 [+*m*12]).

92. F9. Marble bowl. Ht. 13 cm. Diam. 29.5 cm.
Hemispherical bowl with slight foot, unpolished. Perhaps used as a mortar.
Byzantine.
Provenance unrecorded.

93. M314. Marble bowl. Diam. 20 cm.
Half missing.
Fragment of square dish with circular well; unpolished. Perhaps an architectural fragment reused as a bowl or mortar.
From level 149 (B + T?).

94. F1951. White meerschaum box. Diam. 5.9 cm.
Lower part only preserved.
Circular straight-sided container, slightly tapering from base; decoration of incised dots arranged in horizontal

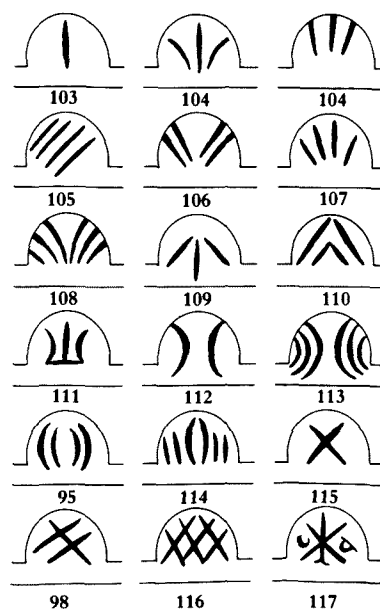
band and four filled semicircles (originally circles).
From level 1413 (*m*16).

Mortars and pestles.

Some 150 fragments of stone mortars were excavated, the majority carved in Proconnesian marble, a few in black, brown, or green granite. All appear to belong to the same basic type: a thick-walled hemispherical bowl with flat rim, three solid lugs of semi-circular horizontal section, and a spout of concave outline. The bases of shallower mortars tend to be flattened for stability, while some of the taller versions have a low but clearly defined collar-foot. Most rims are plain, but occasionally there is a moulding, and one fragment displays a lip. Some of the lugs are decorated with simple incised patterns; however, most remain plain. That both types might adorn the same vessel is exemplified by the one almost complete mortar (no. 95). Thirty-seven fragments from the bodies or plain rims of mortars have been omitted from the catalogue; nearly all came from Byzantine contexts.

95. M10684, 10685. Marble mortar (fig. F). Ht. 12 cm. Diam. 25.5 cm.
Centre of bowl missing.
Hemispherical bowl with flattened base; three lugs, one decorated with two curved pairs of incised lines; moulding on rim continuing to outline sides of spout.
From level 411 (12 +17 + -Mod).

Figure F. Decoration on Mortar Lugs (not to scale)



96. M7037. Marble mortar. L. 11 cm.
Fragment of spout only, with moulded outline as above no. 95.
From level 513* (I12).

97. M1712. Marble mortar. L. 9 cm.
Fragment of spout and rim, with moulded outline as above no. 95.
From level 781 (Mod).

98. M10598. Marble mortar (fig. F). L. 21.5 cm.
Two-thirds missing.
Fragment of bowl with one lug and spout; rim plain, lug decorated with crossed lines.
From level 1385* (-e13).

99. M10038. Marble mortar. Diam. 28 cm.
Half missing.
Fragment of bowl with one lug and spout; rim and lug plain.
From level 562* (m7, 7/8).

Similar fragment of grey and red banded marble M8171.
From level 1118* (e12).

100. M10168. Marble mortar. L. 10 cm.
Fragment of spout with plain rim as above no. 99.
From level 266 (-Mod).

101. M10642. Marble mortar. L. 15.5 cm.
Fragment of bowl with plain rim and spout of waisted curvilinear outline.
From level 1440 (I16 + 18-20).

102. M7884. Mortar of coarse grey stone. L. 12.5 cm.
Fragment of bowl with plain rim and one hollowed lug, perhaps serving as a spout.
From level 1294 (2/212 [+ eT]).

Similar marble fragment M8378.
From level 1329* (I11/e12).

103. M5733. Marble mortar (fig. F). L. 13.5 cm.
Fragment of bowl with plain rim and one lug decorated with single incised line.
From level 701* (10 + 12 [+ R]).

Similar fragments M5695, M5794.
From levels 701*, 1109* (10 + 12 [+ R], -e13).

104. M7158. Marble mortar (fig. F). L. 19 cm.
Fragment of bowl with plain rim and one lug incised with three radiating lines.
From level 1227* (m[?]12).

Similar fragments M50, M10333.
From levels 777, 1397 (-Mod, e20).

105. M5704. Marble mortar (fig. F). L. 11 cm.
Fragment of bowl with plain rim and one lug decorated with four parallel incised lines.
From level 701* (10 + 12 [+ R]).

106. M5752. Marble mortar (fig. F). L. 29 cm.
Fragment of bowl with plain rim and one lug incised with four radiating lines.
From level 1285* (I10).

Similar fragment M10351.
From level 1454 (e16 [+ I16]).

107. M10496. Marble mortar (fig. F). L. 9 cm.
Fragment of bowl with moulded rim and one lug incised with four radiating lines.
From level 1272* (m[?]11).

108. M6140. Marble mortar (fig. F). L. 10 cm.
Fragment of bowl with plain rim and one lug incised with six radiating lines.
From level 536* (e10 [+ 11/e12]).

109. M6945. Marble mortar (fig. F). L. 10 cm.
Fragment of bowl with plain rim and one lug incised with three lines in arrow form.
From level 302* (e13).

110. M5179. Marble mortar (fig. F). L. 10.5 cm.
Fragment of bowl with moulded rim and one lug decorated with four incised lines forming double chevron.
From level 702* (10 + e12).

111. M8617. Marble mortar (fig. F). L. 8 cm.
Fragment of bowl with moulded rim and one lug with incised trident pattern.
From level 1214* (e10).

112. M6977. Marble mortar (fig. F). L. 12 cm.
Fragment of bowl with plain rim and one lug incised with reverse arcs.
From level 457 (10/11 + 16).

113. M8757. Marble mortar (fig. F). L. 7.5 cm.
Fragment with one lug decorated with triple series of reverse arcs.
From level 558* (7 [+ 8]).

114. M9350. Marble mortar (fig. F). L. 15 cm.
Fragment of bowl with moulded rim and one lug decorated with six lines, curved and straight.
From level 1362* (em11 [+ 12]).

115. M10420. Marble mortar (fig. F). L. 8 cm.
Fragment of bowl with moulded rim and one lug decorated with incised cross.
From level 967 ($\frac{1}{2}$ 12 [+ T]).

116. M7036. Marble mortar (fig. F). L. 15 cm.
Fragment of bowl with plain rim and one lug with incised lattice pattern.
From level 1226* (e11 [+12]).

Similar fragment M9093.
From level 1318* (m12).

117. M7148. Marble mortar (fig. F). L. 15 cm.
Fragment of bowl with plain rim and one lug with incised star pattern.
From level 318 (I17 [+ Mod]).

118. M8422. Marble mortar. L. 10 cm.
Fragment of bowl with plain rim and one undecorated lug.
From level 1042* (6/7 + 10/e11)

Fifty-one similar fragments with one or two plain lugs.
Mostly from 10th- to 12th-century contexts, a few from later levels.

119. M3313. Marble mortar. L. 17 cm.
Fragment of bowl with moulded rim and one plain lug.
From level 791* (10 [+ I1?]).

120. M8169. Marble mortar. L. 9 cm.
Fragment of bowl with moulded rim.
From level 1226* (e11 [+12]).

121. M10497. Marble mortar. L. 11.5 cm.
Fragment of bowl with plain-lipped rim.
From level 1272* (m?11).

122. M5513. Marble mortar. Diam. 14.5 cm.
Half missing.
Hemispherical bowl; plain rim and two undecorated lugs.
From level 997* (12-13).

123. M9399. Marble mortar. Diam. 27 cm.
Half missing.
Hemispherical bowl flattened at base; plain rim and two undecorated lugs.
From level 1252* (e11).

Two similar large fragments M8275, M8430.
From levels 925*, 1043* ($\frac{2}{2}$ 11, -1900+).

Nine fragments from bases of similar mortars.
From Byzantine contexts; one from later level.

124. M5679. Marble mortar. Diam. 17.5 cm.
Upper half missing.
Hemispherical bowl with low collar-foot.
From level 701* (10 + 12 [+ R]).

Five similar fragments.
From Byzantine and 16th-century levels.

125. M10667. Marble mortar. Diam. 15.5 cm.
Upper half missing.
Hemispherical bowl with indentation beneath flattened base.
From level 411 (12 + 17 +-Mod).

126. M5573. Marble pestle. L. 8 cm.
Of truncated cone-shape, with narrower (handle) end flat and pounding end convex.
From level 700* (I12/e13).

Fragment of similar pestle M10334.
From level 1397 (e20).

127. M4757. Marble pestle. L. 8 cm.
Chip missing from working end.
Cylindrical handle with conical pounding end.
From level 745 (I12).

Metal vessels.

128. F726. Bronze rim. L. 20.5 cm.
Less than quarter of circle preserved.
Curved strip with one end diagonally cut; outer margin raised. Three rivet holes, with two rivets in place.
From level 341* ($\frac{2}{2}$ 5).

129. F1263. Bronze rim. Diam. 5.1 cm.
One-third missing.
Circular band, probably forming the rim of a vessel with thinner walls that have completely disintegrated.
From level 1252* (e11).

130. F57. Bronze bowl. Diam. 8.6 cm.
One side damaged.
Shallow circular flat-bottomed dish.
From level 51 (B [+ T]).

131. F873. Copper dish. Diam. 8.2 cm.
Hemispherical bowl with flat bottom and moulded rim.
From level 1293 (I15/e16 [+ I19/20]).

132. F69. Tinned copper bowl. Diam. 8.7 cm.
Hemispherical dish with bumpy bottom.
From level 836 (Mod).

133. F1794A. Bronze dish. Diam. 12.3 cm.
Shallow circular vessel with flat bottom and straight sides; perforated in centre.
From level 1292 (I16).

134. F1794B. Bronze dish. Diam. 12.4 cm.
Bottom missing.
Shallow circular vessel; straight-sided with flange at foot.
From level 1292 (I16).

135. F1867. Bronze dish. Diam. 5.2 cm.
Shallow round-bottomed circular bowl, with small segment cut from rim.
From level 274 (ca. 1900+).

136. F472. Bronze standing dish. Diam. 16.5 cm.
Large part of rim missing.
Flat circular plate with up-turned rim and hollow pedestal foot; decorated with single incised circle on front, double circle on back and two lines round rim.
From level 450 (2/16).

137. F1687. Bronze rim. L. 1.9 cm.
One fragment from wavy-edged rim of dish, with punched decoration: six-petalled flower; incised lines parallel to inner curve of rim.
From level 1299 (I19/e20).

138. Iron vessel. L. 24.3 cm.
Fragment of hemispherical bowl with fluted interior; rim with two grooves and shaped edge.
From level 272 (e20).

139. F795. Brass base. Diam. 2.1 cm.
Of cast metal; hollow cone with slightly concave sides, perforated at top; probably the foot of a stemmed bowl.
From level 280 (-Mod).

140. F70. Brass base. Diam. 4.6 cm.
Of cast metal; hollow hemisphere with hole in centre; probably the foot of a stemmed bowl.
From level 839 (19/20).

141. F259. Bronze strainer. Diam. 4.6 cm.
Fragment missing from edge.
Perforated disc.
From level 369 (1/416 [+ ca.1200]).

142. F1929. Holder of alloy, perhaps originally plated. Ht. 5 cm.
Blossom-shaped stand with cast decoration of alternate leaves and flowers. Holder for tea/coffee glass or porcelain bowl.
From level 1428 (I19+).

143. F905. Brass pan. Ht. 4 cm.
End of handle missing.
Cylindrical pan of thin metal, decorated with rib below rim and two faintly incised lines round middle. Maker's mark stamped on side. Brass handle rivetted. Pan probably for preparation of coffee.
From level 1299 (I19/e20).

144. F1879. Bronze handle. L. 2.7 cm.
Fragment of curved handle decorated with raised lozenge and faceted knob. Broken below knob; other end attached to small fragment of thin-walled vessel.
From level 562* (m7, 7/8).

145. F154. Bronze handle or foot of vessel. L. 4.8 cm.
Of square section with angular elbow emphasized by globular knob; wings at one end with rivet holes, a flattened "foot" at the other.
From level 833* (m12+).

146. F1700. Bronze handle. L. 8.1 cm.
Scroll strap handle with tangs at both ends for attachment; notched decoration.
From level 1346 (I15/e16).

147. F101. Bronze handle. L. 6.4 cm.
Scroll strap handle with tangs at both ends for attachment; ornamental moulding at top.
From level 158 (m16).

148. F744. Brass handle. L. 3.2 cm.
End missing.
Handle of rectangular section; oblong attachment plate with two rivets.
From level 621 (e6 + Mod).

Lids.

Turkish lids were made in several sections, rivetted or hammered together. The main part of the lid consists normally of a hemispherical element and a separate collar with a brim, over which the edge of the hemisphere has been hammered. The solid finial is usually rivetted in place and a strap loop for hinge attachment has its ends pushed through the perforation and splayed on the inside of the lid.

149. F791. Bronze lid. Ht. 6.2 cm.

Hollow lid consisting of an upper hemispherical element with ogee profile and beneath this an inverted wide-brimmed hemisphere. Upper element decorated with two incised concentric circles round base of solid six-faceted finial. Oval hole for missing attachment loop.

From level 986 ([e?]18 [B + Mod]).

150. F244. Bronze lid. Ht. 5.6 cm.

Hollow hemispherical lid with collar, and solid bi-conical finial; two incised concentric circles round foot of finial. Square perforation for missing attachment loop. Repaired with circular rivetted plates.

From level 288 (e17).

151. F292. Bronze lid. Ht. 5.9 cm.

Hollow hemispherical lid with collar and solid pear-shaped finial. Strap loop-attachment through perforation.

Turkish.

Provenance unrecorded.

152. F793. Bronze lid. Ht. 5.5 cm.

Body incomplete.

Hollow bun-shaped lid with collar and solid pear-shaped finial; decorated with two pairs of incised concentric circles.

Turkish.

Provenance unrecorded.

153. F794. Bronze lid. Diam. 8.4 cm.

Knob missing; body incomplete.

Hollow bun-shaped lid with collar; two incised concentric circles at foot of missing finial.

Turkish.

Provenance unrecorded.

154. F1868. Bronze lid. Diam. 5.5 cm.

Knob missing.

Hemispherical lid, decorated with two pairs of incised concentric circles.

From level 274 (ca. 1900).

155. F1976. Brass lid. Diam. 4.1 cm.

Knob missing.

Domed lid, cast with series of concave-moulded circles; missing finial originally rivetted at centre.

From level 347.

LIGHTING DEVICES

Candlesticks.

156. F222. Bronze candlestick (pl. 317). Ht. 10.5 cm.

Tulip-shaped socket with six petals, cylindrical stem, saucer drip-catcher and flared foot; decorated with incised rings.

Turkish.

Provenance unrecorded.

157. F269. Bronze candlestick. Ht. 8.1 cm.

Base missing.

Fragment consisting of cast socket and stem, both sections tapering from a carination; decorated with incised and moulded rings.

From level 592 (I16).

158. F245. Bronze candlestick socket. Ht. 3.2 cm.

Fragment similar to no. 157, consisting of socket above the carination; decorated with incised and moulded rings.

From level 288 (e17).

159. F1983. Bronze candlestick. Ht. 4.1 cm.

Most of shaft and base missing.

Fragment consisting of cast cylindrical socket, decorated with three moulded rings; tapering below into stem.

Turkish.

Provenance unrecorded.

160. F66. Bronze candlestick. Ht. 6.9 cm.

Base missing.

Cast bell-shaped socket, carinated stem with peg at bottom threaded for screwing onto missing foot; decorated with incised rings.

From level 356 (-Mod).

161. F1797. Brass candlestick.

Base missing.

Cast bell-shaped socket, moulded stem of octagonal section; peg at bottom threaded for screwing onto missing foot.

From level 259.

162. F903. Bronze taperstick. Ht. 7.7 cm.

Base missing.

Cast cylindrical socket, and moulded stem snapped from base.

From level 1299 (I19/e20).

Lamps.

163. F1864. Bronze rim of polycandelon (?) (pl. 318). L. 5.8 cm.

Fragment consisting of curved bar, outer edge rippled by pairs of incised lines; row of perforations along middle. Remains of openwork bars attached to inner edge. Cf. *Corinth*, no. 860.

From level 274 (ca. 1900+).

164. F1865. Bronze fragment of polycandelon (?) (pl. 319). L. 3.5 cm.

Openwork fragment, pierced by perforations of various shapes, leaving pattern of curved bars. Perhaps part of no. 163. Cf. *Corinth*, no. 859.

From level 274 (ca. 1900+).

165. F746. Bronze lamp cover and chain (pl. 320). Diam. of cover 4.6 cm. L. of chain 7 cm.

Edge of disc badly corroded.

Disc with splay-ended loop through central perforation, attached to chain of five figure-of-eight twisted links.

From level 609* (8).

166. F952. Bronze lamp cover. Diam. 9.5 cm.

Hemispherical plate with central perforation.

From level 1009* (3/412).

167. F263. Bronze lamp cover and chain. Diam. of cover 7.9 cm. L. of chain. 6 cm.

Edge of plate much corroded.

Fragment of circular domed plate with perforations and folded edge. Splay-ended loop through central perforation attached to chain of two elongated figure-of-eight twisted links.

From level 372 (I12/e13 [+16-17]).

168. F1001. Bronze lamp cover and hook. Diam. of cover 8 cm. L. of hook 8.6 cm.

Less than half plate preserved.

Fragment of circular domed plate with perforations. Found together with metal rod broken at one end and bent into a hook at the other.

From level 1009* (3/412).

Lamphangers.

Few complete lamphangers were excavated, but the numerous pieces of wire that are obviously parts of hangers belong to three main types. Those of type A are the most well made, having loops and hooks more

precisely shaped, and being constructed of a wire a little more substantial than the other groups (diam. approx. 0.2 cm). A complete hanger would consist of a hook-and-loop from which suspend three looped elements each joined by a figure-of-eight twisted link to a hook. The hook-and-loop is constructed from a wire rod twisted into a large loop in the middle with one end coiled round the other, which is bent into a small hook. Each looped element is a single wire twisted at either end into a ring. The end of the hook is bent into a small loop for attachment.

Type B, which may be later in date, tends to be made of finer wire (0.1-0.15 cm) and differs slightly in form. The hook-and-loop is more elongated, with a small loop at both ends and one end further bent into a hook. Variants omit the figure-of-eight link between the looped element and the hook, or replace the looped element by a chain of figure-of-eight links.

Type C seems to be still later and less carefully made. Again, there are variants that omit the figure-of-eight link, or replace the looped element by two shorter ones or by stranded loops.

Lengths have been included in the catalogue, although the wire is often so bent as to render measurements meaningless. The diagrams of reconstructed lamphangers are of average proportions.

Bronze Lamphangers, Type A (fig. G) (169-189).

169. F963. L. 5.7 cm. (pl. 321).

Hook-and-loop.

From level 846* (11).

170. F934. L. 3.7 cm.

Fragment of hook-and-loop.

From level 1028* (6).

171. F562. L. 13.5 cm.

Fragments of hook-and-loop and two looped elements.

Third looped element complete with figure-of-eight twisted link and recurved hook.

From level 449* (m7 [+10]).

172. F391. L. 18.7 cm.

Hook-and-loop, two looped elements and fragments of third, and figure-of-eight links.

From level 559* (7 [+8]).

173. F704. L. 6.8 cm.

Fragments of hook-and-loop and three looped elements.

From level 550 (7-9 + ca. 1500).

THE CATALOGUES

FIGURE G. Lamphangers (scale 1:3)



Type A (169-189)

Type B (190-217)

Type C (218-246)

174. F1083. L. 3 cm.

Fragments of hook-and-loop and three looped elements.

From level 1223* (R-10 [+em12]).

175. F499. L. 5.4 cm.

Fragments of hook-and-loop and three looped elements.

From level 563* (m7, 7/8).

176. F469. L. 14 cm.

Fragments of hook-and-loop and two looped elements. Third looped element complete.

From level 558* (7 [+8]).

177. F1939. L. 7 cm.

Fragments of hook-and-loop and looped elements.

From level 1427 (2/26, 18, Mod).

178. F620. L. 2.7 cm.

Fragments of hook-and-loop and looped element.

From level 449* (m7 [+10]).

179. F600. L. 15.9 cm.

Looped element, two figure-of-eight twisted links and recurved hook.

From level 560* (m7).

180. F43. L. 19.6 cm.

Looped element and fragment of figure-of-eight link. From level 163* (R + ?B).

181. F1672. L. 5.6 cm.

Fragment of looped element.

From level 1381.

182. F467. L. 3.1 cm.

Fragments of looped element and figure-of-eight twisted link.

From level 563* (m7, 7/8).

183. F566. L. 6 cm.

Fragments of looped element and figure-of-eight twisted link.

Provenance unrecorded.

184. F241. L. 5.9 cm.

Fragment of looped element, with figure-of-eight twisted link and hook.

From level 525* (2/28).

185. F803. L. 8.8 cm.

Fragment of looped element, figure-of-eight twisted link and fragment of hook.

From level 563* (m7, 7/8).

186. F565. L. 6.3 cm.
Fragment of looped element, figure-of-eight twisted link and fragment of hook.
From level 558* (7 [+8]).

187. F891. L. 4 cm.
Fragment of figure-of-eight link and recurved hook.
From level 1040* (m12).

188. F1562. L. 3.4 cm.
Recurved hook. From level 1250* (11).

189. F560. L. 2.5 cm.
Recurved hook.
From level 564* (m7).

Bronze Lamphangers, Type B (fig. G) (190-217).

190. F961. L. 11.9 cm.
Hook-and-loop with fragments of three looped elements.
From level 845* (1/211).

191. F1585. L. 18.3 cm.
Hook-and-loop with fragments of three looped elements.
From level 1285* (l10).

192. F942. L. 11.2 cm.
Hook-and-loop and fragments of three looped elements.
From level 848* (1/211).

193. F978. L. 15.8 cm.
Hook-and-loop and fragments of two looped elements.
From level 1238* (e11).

194. F1583. L. 11.5 cm.
Hook-and-loop.
From level 1285* (l10).

195. F1607. L. 14.2 cm.
Hook-and-loop; hooked end flattened instead of terminating in small loop.
From level 1158* (-l12/e13).

196. F1035. L. 8.5 cm.
Hook-and-loop, and fragment of loop.
From level 848* (1/211)

197. F1591. L. 9.4 cm.
Fragments of hook-and-loop and looped elements.
From level 1233* (l10-e11).

198. F1253. L. 8.8 cm.
Fragments of hook-and-loop and looped elements.
From level 1213* (e10 [+?]).

199. F1262. L. 6 cm.
Fragment of hook-and-loop.
From level 1213* (e10 [+?]).

200. F84. L. 13.4 cm.
Looped element and hook.
From level 792* (10 + l11/e12).

201. F955. L. 13.2 cm.
Looped element and hook.
From level 845* (1/211).

202. F1254. L. 5.6 cm.
Fragment of looped element and hook.
From level 1213* (e10 [+?]).

203. F1870. L. 8.5 cm.
Fragment of looped element, two figure-of-eight twisted links and fragment of hook.
From level 955* (l10/e11 + 1/212).

204. F860. L. 10.6 cm.
Looped element.
From level 964* (e-m11).

205. F1587. L. 12.3 cm.
Looped element.
From level 1285* (l10).

206. F1586. L. 9.7 cm.
Looped element.
From level 1285* (l10).

207. F943. L. 10.3 cm.
Looped element.
From level 848* (1/211).

208. F1557. L. 6.1 cm.
Fragment of looped element.
From level 1233* (l10-e11).

209. F1989. L. 7.9 cm.
Fragment of looped element.
From level 955* (l10/e11 + 12).

210. F1260. L. 6.9 cm.
Fragment of looped element.
From level 1253* (e11 [+12]).

211. F1986. L. 7.3 cm.
Fragment of looped element, figure-of-eight twisted link and hook.
Provenance unrecorded.

212. F1553. L. 4.9 cm.
Figure-of-eight twisted link and hook.
From level 1234* (l10-e11).

213. F1920. L. 2.7 cm.
Hook.
From level 1371* (10-11 + m12).

214. F1036. L. 9.6 cm.
Hook.
From level 1222* (10+).

215. F1584. L. 11.5 cm.
Hook-and-loop, and fragments of three chains of figure-of-eight twisted links, the largest consisting of four and a half links.
From level 1285* (l10).

216. F1579-F1582. L. of largest frag. 10.5 cm.
Fragments of hook-and-loop and chains of figure-of-eight twisted links (longest fragment: seven links); with two hooks attached.
From level 1285* (l10).

217. F974. L. 14 cm.
Fragments of hook-and-loop and chain of figure-of-eight twisted links.
From level 1238* (e11).

Bronze Lamphangers, Type C (fig. G) (218-246).

218. F178. L. 15 cm.
Hook-and-loop, three looped elements and two hooks.
From level 748* (l10).

219. F1862. L. 9.5 cm.
Hook-and-loop, two looped elements and fragment of third; two hooks.
From level 1450 (e16).

220. F784. L. 8.5 cm.
Hook-and-loop, one looped element and fragments of two others; fragment of link.
From level 484 (B + 16).

221. F921. L. 8.1 cm.
Hook-and-loop and fragments of two looped elements.
From level 932* (e11 + m12).

222. F765. L. 11 cm.
Hook-and-loop and fragment of looped element.
From level 953 (l11/e12 [+ l17]).

223. F907. L. 23 cm.
Hook-and-loop, two looped elements and hook.
From level 932* (e11 + m12).

224. F855. L. 14.5 cm.
Hook-and-loop, one looped element; a second strand of wire looped round the hook.
From level 944.

225. F349. L. 17 cm.
Hook-and-loop, one looped element and hook.
From level 949.

226. F1979. L. 8.3 cm.
Hook-and-loop, and fragment of looped element.
From level 507 (l16).

227. F1738. L. 7.3 cm.
Figure-of-eight twisted link, looped element, second link and hook.
From level 1135 (B-12 [+ T-Mod]).

228. F622. L. 11.2 cm.
Figure-of-eight twisted link, looped element, second link and hook.
From level 1119* (-e13).

229. F845. L. 15.4 cm.
Looped element, figure-of-eight twisted link and hook.
From level 1468.

230. F747. L. 12.7 cm.
Looped element, figure-of-eight twisted link and hook.
From level 1006* (l12).

231. F863. L. 17.5 cm.
Looped element, figure-of-eight link and hook.
From level 1054* (m[?]12).

232. F786. L. 4 cm.
Fragment of looped element, figure-of-eight twisted link and hook.
From level 383 (-12[+ 19]).

233. F915. L. 20.5 cm.
Looped element and figure-of-eight twisted link.
From level 1310* (ml12).

234. F1816. L. 9.9 cm.
Looped element.
From level 1061* (1/212 [3/212]).

235. F1968. L. 12 cm.

Looped element.

From level 1026.

236. F996. L. 5.5 cm.

Fragment of looped element.

From level 1323* (l11/e12).

237. F869. L. 5.9 cm.

Fragment of looped element.

From level 931* (2/12).

238. F1926. L. 11.5 cm.

Fragment of looped element.

From level 967 (1/212 [+T]).

239. F1877. L. 4 cm.

Fragment of looped element.

From level 1460 (e6 + B + 16).

240. F1335. L. 1.7 cm.

Fragment of link and hook.

From level 1254* (e11).

241. F949. L. 3.3 cm.

Fragment of link and hook.

From level 1310* (m12).

242. F813-816 (pl. 322). L. 21.7 cm.

Hook-and-loop with hooked end flattened; three long looped elements each linked by a shorter looped element to a hook.

From level 937* (3/412).

243. F948. L. 22 cm.

Hook-and-loop, three looped elements, two of which are stranded; two hooks.

From level 1009* (3/412).

244. F114. L. 23.5 cm.

Two stranded links with hook attached. Each link consists of a single strand of wire folded into three and twisted leaving a loop at either end.

From level 910* (-1/213).

245. F347. L. 15.8 cm.

Fragment of stranded looped element and figure-of-eight twisted link.

From level 825* (6-10 [+12]).

246. F85. L. 19.9 cm.

Fragment of stranded looped element.

From level 792* (10 + l11/e12).

METAL FITTINGS

Chains.

Chains were most commonly composed of figure-of-eight twisted links, in which one loop is set at right-angles to the other. Sometimes the links are flat, both loops lying in the same plane; or they are B-shaped, the shank bent into a C with the ends crossing. Occasionally there is a coil link, twisted into a ring with ends overlapping, sometimes curled round several times to form a double- or triple-stranded circle. With ring links the ends are welded together. In some cases tool marks are still visible where sections of equal length have been cut from a metal rod, or where they have been gripped by pliers and twisted into shape. A few of the more fragmentary links and chains have been omitted from the catalogue; all were of the same type and date as the examples included.

247. F644. Bronze link. Diam. of wire 0.4 cm. L. 2.3 cm.

Figure-of-eight twisted link. (fig. H).

From level 558* (7 [+8]).

Bronze chains of figure-of-eight twisted links (248-251).

248. F1534. Diam. of wire 0.3 cm. L. 4.9 cm. L. of link 1.8 cm.

Four and a half links.

From level 1262* (e10).

249. F1535. L. 7.4 cm. L. of link 1.9 cm.

Eight and a half links.

From level 1262* (e10).

250. F224. L. 11.6 cm. L. of link 2 cm.

Seven and a half links.

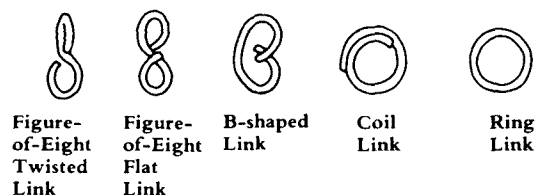
From level 536* (e10 [+11/e12]).

251. F995. L. 6.5 cm. L. of link 2 cm.

Four links.

From level 1327* (-l11/e12).

FIGURE H. Links (scale 1:1)



Bronze chains of figure-of-eight twisted links (252-254). (diam. of wire 0.2 cm)

252. F864. L. 2.9 cm. L. of link 1.1 cm.

Two and two half links.

From level 163* (R + ?B).

253. F1308. L. 10.8 cm. L. of link 1.4 cm.

Twelve links.

From level 1252* (e11).

254. F1306. L. 14.5 cm. L. of link 1.7 cm.

Nine links.

From level 1381.

255. F1309. Bronze chain. Diam. of wire 0.2 cm. L. 4 cm. L. of link 1.5 cm.

Three figure-of-eight flat links (fig. H).

From level 1252* (e11).

Bronze chains of figure-of-eight twisted links (diam. of wire 0.15 cm) (256-257).

256. F563. L. circa 13 cm. L. of link 1.1 cm.

Four fragments totalling thirteen complete and five half links.

From level 449* (m7 [+10]).

257. F725. L. circa 32 cm. L. of link 1.2 cm.

Three fragments totalling thirty-two complete and four half links.

From level 611* (8).

258. F1873. Bronze chain. Diam. of wire 0.1 cm. L. of longest frag. 3.5 cm. L. of link 1 cm.

Four fragments totalling eleven complete and two half figure-of-eight twisted links.

From level 1035* (e10 + ½11).

259. F822. Bronze chain. Diam. of wire 0.1 cm. L. 14 cm. L. of link c. 1.2 cm.

Twelve and a half links of figure-of-eight twisted, flat, and B-shaped types. On end attached to a coil link and the fragment of a looped element.

From level 1020* (¾12 [+10/e11]).

260. F1896. Bronze chain. Diam. of wire 0.25 cm. L. 10.3 cm.

Two fragments totalling seven figure-of-eight twisted links.

From level 1457 (¾16 + 117/18).

Bronze chains of coil links. Diam. of wire 0.05 cm. 261-262.

261. F828. L. 13.7 cm. Twenty-nine links, one double-, the remainder triple-stranded.

From level 491 (119).

262. F829. L. 6.3 cm. Fourteen links, single-, double-, and triple-stranded.

From level 491 (119).

263. F1692. Bronze chain. Diam. of wire 0.1 cm. L. 2 cm.

Eleven ring links, each ring linked ahead through the next two links.

From level 1299 (119/e20).

264. F748. Bronze chain. Diam. of wire 0.1 cm. L. 53.9 cm.

Three fragments totalling nine links; each link composed of a single strand of wire folded to form a triple loop at each end, with the centre part tightly bound.

From level 492 (m19+).

265. F831. Bronze chain. Diam. of wire 0.05 cm. L. of longest frag. 3.8 cm.

Ten fragments of strand links as above.

From level 491 (119).

266. F295. Brass chain. Diam. of wire 0.05 cm. L. 8.7 cm.

Twelve strands of fine wire bound into a loop, the ends plaited into a "knitted" chain.

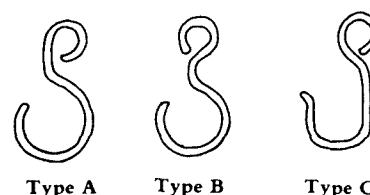
From level 539 (-10 [+T]).

Hooks.

Hooks are of two kinds: the simple variety, which is similar to a figure-of-eight link, with one end open and occasionally the looped end twisted forwards (fig. I, a and b); and the recurved type, which has a loop at one end of the shaft for attachment and a slightly angular bend with its end turned outwards (Fig. I, c). Some of the hooks may have been from lamphangers.

267. F643. Bronze hook and chain. L. 26.6 cm. Diam. of wire 0.3 cm. L. of link 2.1 cm. L. of hook 5 cm.

FIGURE I. Hooks (scale 1:1)



Simple hook with loop through last of fifteen figure-of-eight twisted links.

From level 563* (m7, 7/8).

268. F710. Bronze hook and link (pl. 323). L. 7.7 cm. Diam. of wire 0.4 cm. L. of link 2.8 cm. L. of hook 5.5 cm.

Recurved hook attached to figure-of-eight twisted link.

From level 564* (m7).

269. F471. Bronze hook. L. 5.1 cm.

Recurved type.

From level 563* (m7, 7/8).

270. F623. Bronze hook. L. 4.7 cm.

Recurved type.

From level 563* (m7, 7/8).

271. F654. Bronze hook (pl. 324). L. 3.7 cm.

Both ends broken.

Fragment of bend, rectangular in section; of similar shape and dimensions to *Corinth*, no. 1450 (cf. Wulff, *Altchristliche und Mittelalterliche Bildwerke* I, pl. XLVIII, no. 1004, for similar hook used to suspend polycandelon).

From level 575.

272. F820. Bronze hook. L. 5 cm.

Hook with loop end twisted round shank.

From level 937* (3/412).

273. F279. Bronze hook and link. L. 4.3 cm. Diam. of wire 0.25 cm.

Simple hook with loop twisted at right-angles through B-shaped link.

From level 384* (3/412).

274. F1921. Bronze hook. L. 4.8 cm.

Simple S-shape, with one end pressed together to close loop.

From level 1411 (m16).

275. F1578. Bronze loop. Diam. 5.3 cm.

Wire rod bent into circular loop with ends intertwined.

From level 1151* (6 + 112).

Nails and wall-hooks.

The few bronze nails recovered from the site are all noted in the catalogue below. Of some seventeen hundred iron nails, excavated from levels of the sixth century onwards, many were fragmentary, all were badly corroded, and it was often difficult to determine their original form. A selection only has been included,

to illustrate characteristic shapes and dimensions. In the main they are large, probably because such small nails as were used have rusted and completely disintegrated. There is usually little trace of the objects to which nails were attached, although occasional fragments of wood were found associated with the coffin nails. Cf. *Corinth*, pp. 140-3.

276. F41. Bronze nail. Diam. of head 0.8 cm. L. 3.5 cm.

Slightly convex head, roughly hexagonal; shank rectangular in section.

From level 163* (R + ?B).

277. F16. Bronze nail. Diam. of head 0.9 cm. L. 3 cm.

Head roughly circular; shank rectangular in section.

From level 165 (e16+).

278. F423. Bronze tack. Diam. of head 1 cm. L. 1.5 cm.

Head circular; shank rectangular in section.

From level 315* (14/e5 - 5/6).

Iron coffin nails (279-281).

Head roughly square; shank rectangular in section.

279. Diam. of head 1.5 cm. L. 3.5 cm.

From level 929* (-m12).

280. Diam. of head 1.8 cm. L. 5.4 cm.

From level 929* (-m12).

281. Diam. of head 2.6 cm. L. 7.5 cm.

From level 962* (11(-12+)).

Iron nails (282-285).

Head roughly circular; shank square in section.

282. Diam. of head 2 cm. L. 4 cm.

From level 979* (e10).

283. Diam. of head 2.6 cm. L. 5.5 cm.

From level 1287* (em10).

284. Diam. of head 3 cm. L. 6.5 cm.

Turkish.

Provenance unrecorded.

285. Diam. of head 4 cm. L. 5 cm.

Turkish.

Provenance unrecorded.

Iron nails (286-289).

Head roughly square; shank rectangular in section.

286. Diam. of head 3 cm. L. 7.5 cm.
From level 1465* ($\frac{2}{26}$).

287. Diam. of head. 2.4 cm. L. 4.8 cm.
From level 982* (I11-12).

288. Diam. of head 2.2 cm. L. 8 cm.
From level 971 ($\frac{1}{2}12 + 16 +$).

289. Diam. of head 3.2 cm. L. 17 cm.
From level 1380* (12, I12 + 6).

290. Iron nail. Diam. of head 3 cm. L. 8 cm.
Slightly convex head, roughly circular; shank circular in section.
From level 898 (e13 + 16/17 [+ Mod]).

Iron nails (291-294).
Oval head; shank square in section.

291. Diam. of head 2 × 2.8 cm. L. 9 cm.
From level 463 (e6 + T).

292. Diam. of head 3 × 3.7 cm. L. 12 cm.
Turkish.
Provenance unrecorded.

293. Diam. of head 2.5 × 3.2 cm. L. 23 cm.
From level 1117* (11).

294. Diam. of head 2.2 × 3.7 cm. L. 20 cm.
From level 917* (e12).

295. Iron nail. Diam. of head 2.9 × 3.5 cm. L. 14.5 cm.
Oval head; shank roughly circular in section.
From level 990 ($\frac{1}{4}17$).

Iron nails (296-297).
Rectangular head; shank square in section.

296. Diam. of head 2 × 2.5 cm. L. 12.8 cm.
From level 684 (I6 + B + 16).

297. Diam. of head 3 × 3.5 cm. L. 19.3 cm.
From level 72 (– e18).

298. Iron nail. Diam. of head 2 cm. L. 8.5 cm.
Hexagonal head; shank square in section.
From level 1292 (I16).

299. Iron nail. Diam. of head 2 cm. L. 18.5 cm.
Octagonal head; shank square in section.
From level 268 (B-Mod).

Iron nails (300-302).

Head roughly circular; shank square in section, attached to head off centre.

300. Diam. of head 2 cm. L. 11 cm.
From level 415 (m17).

301. Diam. of head 2 cm. L. 16 cm.
From level 415 (m17).

302. Diam. of head 3.8 cm. L. 7.5 cm.
From level 1428 (I19+).

303. Iron brace. L. 25.8 cm.

Corroded.

Bar L-shaped at one end, tapering to a point at the other.

From level 861* (10 [-I12/e13]).

304. F276. Bronze cramp (?). L. 8.5 cm.
One end missing.

Fragment of bar, one end rounded with tang bent into a loop.

From level 369 ($\frac{1}{4}16 [+ ca. 1200]$).

305. F924. Bronze wall-hook. L. 5.4 cm.
End missing.

Fragment of curved bend with spike for nailing into wall.

From level 1293 (I15/e16 [+ 19/20]).

306. F1696. Bronze wall-hook. L. 2.5 cm.
Spike missing.

Fragment with decahedral knob at end; bend with sharp elbow; collar and pyramidal moulding above broken spike.

From level 1376 (– 19).

Split pins, rings, and handles.

307. F1953. Bronze link and split pin. L. 6.2 cm.
Fragment of figure-of-eight twisted link through loop of split pin.
From level 1467* (I5).

308. F327. Bronze ring and split pin (pl. 325). Diam. of ring 2.5 cm. L. of pin 5.3 cm.
Ring through loop of split pin. Cf. *Corinth*, no. 903.
From level 399* (8 [+ 12]).

309. Iron split pin. L. 8.5 cm.
Corroded.

Split pin with loop head and pointed arms of unequal length.

From level 936* (I10 – e11 [+ m12]).

310. Iron ring. Diam. 4 cm.
Corroded.
Circular hoop.
From level 1261* (*m[?]*10).

311. Iron ring. Diam. 4.5 cm.
Corroded.
Circular hoop.
From level 1240* (*e*11).

312. F111. Iron ring. Diam. 2.6 cm.
Corroded.
From level 909* (*l*[?]12).

313. F1081. Bronze ring and tab (pl. 326). Diam. of ring 3.3 cm.
Rod of circular section hammered at one end to form a rectangular tab, the other end bent into a loop attached to a split ring. Cf. *Corinth* no. 858 (leaf-shaped tab attached to link-chain).
From level 1323* (*l*11/*e*12).

314. F1257. Bronze ring handle (pl. 327). Diam. of ring 2.3 cm.
Attachment knob broken at base.
Globular knob with nipple, surmounting a disc; a circular depression on each side of knob into which fits the end of a cut ring of angular section and uneven width.
From level 1252* (*e*11).

315. Iron ring and split pin. Diam. of ring 6 cm. L. of pin 7 cm.
Circular hoop interlinked with loop of split pin.
From level 553 (*e*16).

316. Iron ring handle. Diam. 3.5 cm.
Corroded.
Ring interlinked with loop of cotter pin; arms of pin penetrating central perforation in round plate and splayed at back.
From level 1292 (*l*16).

317. Iron handle plate. Diam. 3.5 cm.
Corroded.
Round plate with central perforation containing cotter pin; pin splayed at back of plate, with loop at front for attachment of missing ring handle.
From level 1292 (*l*16).

318. F1899. Brass handle. W. 3 cm.
Grip broken.
Fragment of open elliptical grip with projecting rod for attachment, perhaps to a small drawer. Surface filed.
From level 1096 (*m*16 [+18]).

319. F1737. Bronze handle. L. 3.9 cm.
Of open trilobate shape, with side lobes slightly scalloped.
From level 1274 (*m*19).

Hasps and Hinges.

Small in size, Byzantine hasps were probably used to fasten caskets. Each shows the same structure: a metal strap perforated for attachment and joined by a three-knuckle hinge to the fastener plate. The latter consists of a narrow bar with a clasp in the form of a pierced plate projecting from the underside. The Turkish bronze hinges are larger and may have come from boxes or cabinets.

320. F425. Bronze hasp. L. of strap 6.8 cm. L. of fastener 3.9 cm.
End of strap broken.
Strap decorated with incised border lines; fastener terminating in ornamental cross cast in relief. Clasp with circular perforation cast in one piece with fastener plate.
Byzantine.
From level 591.

321. F1555. Bronze hasp. L. 5 cm.
Strap broken at first perforation.
Strap and fastener decorated with notched edges and three rows of dot-and-circles. Clasp with circular perforation rivetted to fastener plate. Cf. *Corinth*, no. 913.
From level 1261* (*m*[?]10).

322. F1596. Bronze hasp strap (pl. 328). L. 7.3 cm.
Hinge end of strap missing; T-end disintegrated in cleaning.
T-shaped attachment plate, decorated with cup depressions alternating with pairs of dot-and-circles.
From level 1287* (*em*10).

323. F1999. Bronze hasp fastener. L. 5.7 cm.
Elongated triangular plate with tang at one end composing single knuckle of hinge. Clasp with oblong perforation, rivetted to plate.
From level 1345 (B-12 +115).

324. Iron hinge. L. 3 cm.

Corroded fragment, side and bottom missing.

Part of leaf with two nail-holes; side curled over to form knuckle.

From level 978* (12[?+]).

325. F1691. Brass hinge. Ht. 4.1 cm.

One leaf damaged.

Surface hinge with antique butt: pair of ornamental plates with three perforations in each for attachment pins. Peg at side of one to slot into corresponding cylindrical socket on second.

From level 1299 (119/e20).

326. F1786. Brass hinge leaf. Ht. 4.1 cm.

Plate slightly damaged.

One leaf of surface hinge, as above; with peg. Pair to no. 325.

From level 1299 (119/e20).

327. F787. Brass hinge leaf. Ht. 4 cm.

Peg missing.

One leaf of surface hinge with antique butt: plate with ornamental outline and three perforations.

From level 1108 (-12/13 [+T]).

328. F1827. Brass hinge leaf. Ht. 4.1 cm.

Peg leaf of surface hinge with antique butt: plate with shaped outline and ornamental piercing.

From level 267 (119/20).

329. F769. Brass hinge peg. Ht. 4.1 cm.

Peg of surface hinge, with fragment of plate attached.

From level 492 (m19+).

330. F1863. Brass hinge leaf. Ht. 5 cm.

One leaf of cabinet flush hinge: rectangular plate of L-shaped section with cylindrical socket at side. Three screw-holes in plate; ornamental knob at base of socket.

From level 274 (ca. 1900).

331. F1897. Brass hinge leaf. L. 2.3 cm.

Less than half preserved.

One leaf of cabinet flush hinge: fragment of plate with cylindrical socket and ornamental knob.

From level 1396.

Key-rings and keys.

Simpler Byzantine key-rings may have been worn on the finger; those of more exotic shape were probably suspended from a chain or thong. When in use, the ring

acted as an extension to the bow of the key, a collar on each side preventing the key from slipping. A small stud on the opposite side of the ring may have served on occasion as a seal. One Saraçhane example shows traces of an engraved design. The keys attached to these rings are of a stubby type, with short stem and pierced blade set at right-angles to the annular bow. This latter was made U-shaped, the prongs being then pinched together to encircle the neck of the ring between its moulded collars. Cf. *Corinth*, p. 137.

332. F1180. Bronze key ring (pl. 329). Diam. 3.4 cm.

Half missing.

Fragment of ring of circular section, decorated with moulded and incised rings; oval seal-stud.

From level 1246* (18/e9).

333. F1091. Bronze key ring (pl. 330). Diam. 3.7 cm.

Quatrefoil ring; circular seal-stud decorated with incised cross between parallel lines. Cf. *Corinth*, nos. 982, 995.

From level 1222 (10+).

334. F1078. Bronze key (pl. 331). L. 2.6 cm.

Stubby type key with hollow shank; blade pierced by two rectangular perforations. Probably belongs with no. 333.

From level 1222* (10+).

335. F385. Bronze key ring (pl. 332). Diam. 3.1 cm.

Half missing.

Fragment of knopped ring with square seal-stud. Cf. *Corinth*, nos. 979-980, etc.

From level 536* (e10 [+11/e12]).

336. F908. Bronze ring and key (pl. 333). Diam. of ring 2.2 cm. L. of key 2.5 cm.

Key ring knopped, as above, with oval seal-stud. Stubby key with hollow shank; blade pierced by two rectangular perforations.

From level 932* (e11 + -m12).

337. F964. Bronze key. L. 2.7 cm.

Loop broken.

Stubby type key with hollow shank; blade pierced by two rectangular perforations.

From level 1323* (111/e12).

338. F138A. Iron key (pl. 334). L. 14.5 cm.

Corroded.

With elliptical cusped bow and long hollow shank; rectangular blade in same plane as bow, divided into two bits by narrow notch.

From level 874* (10 -112/e13).

339. F724. Brass key. L. 6.6 cm.

With ornamental perforated bow and hollow shank with ring mouldings; rectangular blade with two notches on opposite sides.

From level 492 (*m19+*).

340. F1697. Brass key. L. 7 cm.

With elliptical bow and hollow shank with ring mouldings; rectangular blade with two notches on opposite sides.

From level 1299 (*l19/e20*).

Casings, plaques, and bindings.

Several cylindrical bronze 'bowls' were found, whose function is uncertain. One of similar dimensions to no. 343 was excavated at Corinth and was thought to have served pharmaceutical purposes (cf. *Corinth*, no. 547, p. 68). Grooves and rivets in no. 342 suggest an alternative: that the bowls may have acted as facings to more perishable materials. It is conceivable that they were casings protecting the ends of wooden door pivots, although they do not show the wear that might be expected from such usage.

341. F1229. Bronze casing. Diam. 3.6 cm. Ht. 1.6 cm. Base fragmentary.

Strip of metal bent into a ring, and attached to disc-base.

From level 1249* (*-e10*).

342. F10. Bronze casing. Diam. 8.8 cm. Ht. 6.6 cm.

Base missing.

Metal strip bent to form cylinder; one end of band cut twice, plain end slotted into the cuts leaving a wedge-shaped tooth on the outside. Two rivet holes, one with rivet in place, either side of join towards edge of cylinder; opposite edge hammered inwards. Two grooves encircling body of cylinder.

From level 111* (*LR-12*).

343. F1693. Bronze casing. Diam. 4.1 cm. Ht. 2.7 cm. Sides fragmentary.

Circular band with margin hammered over edge of disc-base.

From level 1181* (*m12*).

344. F890. Bronze strip. W. 0.6 cm.

Crumpled.

Metal strip, perhaps originally attached to no. 345, and forming part of a small casing.

From level 1295* (*l12/e13*).

345. F889. Bronze disc. Diam. 2.6 cm.

Base of cylindrical casing; see above no. 344.

From level 1295* (*l12/e13*).

346. F706. Bronze casing. Diam. 8.4 cm. Ht. 6.5 cm.

Side slightly damaged.

Cylindrical casing composed of band and disc, with groove just below rim. One end of band toothed with alternate tongues and wedges, produced by pairs of convergent cuts; plain end slotted into the latter so that the tongues remain on the outer surface. Margin similarly slotted into the toothed edge of the disc.

From level 309* (*e13*).

347. F11. Bronze casing. Diam. 4.4 cm. Ht. 3.4 cm.

Circular band with margin hammered over edge of disc-base; groove just below rim.

From level 165 (*e16+*).

348. F789. Bronze casing. W. 3.7 cm. L. 3 cm.

Slim rectangular casing, consisting of two plates of unequal size, the edges of the larger folded to form narrow sides. The middle side is decorated with incised lines; the adjoining sides terminate at the opposite end, one in a tang, the other with a notch. A second tang projects from the main face of the larger plate, next to the notch. These would have attached the casing to its perished core.

From level 1015* (*-12*).

349. F1568. Iron casing plate. W. 3.5 cm. L. 3.8 cm.

Corroded; edges broken. Fragments of wooden core preserved.

Square plate with one edge bent to form narrow side; a rivet at each corner.

From level 1218* (*m7 [+10]*).

350. F1258. Bronze plaque (pl. 335). Ht. 2.2 cm.

Edge considerably damaged.

Fragment of thin decorative plate with shaped outline; two perforations at top for attachment.

From level 1326* (*m11 + l12/e13*).

351. F1908. Bronze binding. W. 2.3 cm. L. (i) 6.1 cm, (ii) 7.1 cm, (iii) 1.8 cm.

Ends broken.

Three fragments of thin metal sheet with repoussé decoration consisting of an inscription on stippled background between borders of S-curves; perforated for attachment to book or box: (i) Band: tongue at one end curled to form knuckle of hinge; near to same end two slots with small strap-loops, ends splayed at back. (ii) Band: two tongues at one end curled to form knuckles

of hinge, probably fitting either side of knuckle on i.
(iii) Band: two slots with straps-loops. Probably joining ii.

Turkish.

Provenance unknown.

352. F1977. Bronze binding. L. of three patterned frags. 7 cm.

Five decorated and five plain fragments of thin metal sheet. Repoussé decoration: rectangular panel containing intertwining strap and stylized leaf pattern; border of S-curves.

From level 1461 (Mod, l6 + T).

353. F1883. Bronze binding. L. 1.9 cm.

Five fragments of metal sheet, bent along the edges of the panels, originally encasing an object with polygonal cross-section. Side panel scratched to facilitate adhesion of overlap. Incised decoration: panels of alternating patterns, (a) hatched triangles with grasslike projections, (b) pairs of inclined lines.

From level 990 (2/16).

354. F1790. Bronze plaque. Diam. 1.2 cm.

Thin circular plate with repoussé decoration: twelve-petalled rosette.

From level 1299 (l19/e20).

355. F1699. Brass plaque. Diam. 3.6 cm.

Eight-petalled rosette, cast in relief. Perhaps mount for furniture handle.

From level 1299 (l19/e20).

356. F1988. Brass plaque. Ht. 4.9 cm.

One side missing.

Tulip-shaped plate, decorated with three leaves cast in relief.

From level 505 (Mod).

Miscellaneous fragments.

357. F1554. Bronze fragment (pl. 336). L. 3.7 cm.

Ends of bar and strut broken.

Bar with rounded element projecting at right-angles, strut intersecting angle between.

From level 1233* (l10-e11).

358. F1315. Bronze container. L. 4.1 cm.

Fragmentary.

Hollow container of semicircular section with three internal compartments. Associated with a coiled strip.

From level 1213* (e10 [+ ?]).

359. F627. Bronze tubing. L. (i) 11.5 cm, (ii) 9 cm.

Two fragments, each part of a thin metal sheet rolled round onto itself to form a tube.

From level 560* (m7).

360. F773. Bronze tubing. L. 7.7 cm.

Fragment of thin metal sheet rolled round onto itself to form a tube.

From level 604* (8 + e11).

361. F567. Bronze tubing (pl. 337). L. 5.7 cm.

End broken.

Fragment of metal sheet twisted into a tube, tapering to a point; remains of four perforations.

From level 560* (m7).

362. F1316. Bronze tubing. L. 5.9 cm.

End broken.

Thin metal sheet curled into slightly tapering cylinder, strengthened at wider (complete) end with a second band of metal and narrow beading. Straight band of beading (eight beads to the cm) may have covered join along length of cylinder. An identical cylinder and second band of beading came from the same context, and may have composed part of the same article.

From level 1252* (e11).

363. F243. Bronze beading. L. (i) 8 cm, (ii) 5.8 cm.

Two strands of beaded wire (five beads to the cm).

From level 799* ([m?]12).

364. F1944. Bronze cone. Ht. 1.7 cm.

Thin sheet of metal curled to form a truncated cone with rings of wire strengthening both ends.

From level 1432* (e10[+]).

365. F1313. Bronze object. Diam. of discs 1.1 cm.

Fragmentary.

Four plates, each consisting of a thin bar with one end broken, the other terminating in a disc pierced by a strand of wire; wire still links two of the plates. Other fragments of bronze strips of various widths were associated with the group.

From level 1432* (e10[+]).

HOUSEHOLD TOOLS

Spades.

366. F298. Iron spade. L. 27 cm.

Badly corroded; blade broken; handle missing.

Blade with square shoulders and cylindrical socket for

insertion of missing wooden handle. A similar spade or shovel came from the same context. F299.
From level 550 (7-9 + ca. 1500).

Knives.

367. F1264. Iron knife blade. L. 8 cm.
Tip of blade broken off; surface corroded.
Single-edged blade, with tang for insertion into missing handle, probably of wood. Oblong bronze mount between blade and tang. Cf. *Corinth*, nos. 1571-1573.
From level 1249* (-e10).

368. F1314. Iron knife blade. L. 13 cm.
Surface corroded.
Single-edged blade; blunt edge continuing into a short tang for insertion into missing handle.
From level 1252* (e11).

369. F844. Iron knife blade. L. 8.4 cm.
Handle end broken off; surface corroded.
Single-edged blade, tapering to point.
From level 937* (¼12).

370. Iron handle. L. 3.5 cm.
Corroded; blade missing.
Tang continuous with blade, bent to form loop handle.
From level 1238* (e11).

371. F197. Composite knife handle. L. 9.5 cm.
Fragmentary; blade missing.
Wooden side pieces rivetted with bronze pins to iron tang (continuation of missing blade). Terminal of ivory: knob and two plates divided by metal plates, all tear-shaped in section; end decorated with two metal-crescent-shaped cells containing ivory inlay.
From level 516.

372. F859. Composite knife handle. L. 1.3 cm.
Small fragment.
Bronze plate of tear-shaped section, with traces of iron tang and wooden side pieces.
From level 1292 (I16).

373. F343, Mus 7946. Ivory knife knob. L. 1.5 cm.
Terminal knob of tear-shaped section, perforated by iron tang; end decorated with two crescent shaped cells containing ivory inlay.
From level 516.

374. F363, Mus 7956. Ivory knife knob. L. 2.2 cm.
As above; end decorated with circle and seven dots.
From level 446 (I16).

375. F799, Mus 7955. Ivory knife handle side piece. L. 4.6 cm.

End nearer blade broken.

Side piece with hooked profile, inner face flat, outer curved; two rivet holes for attachment to missing blade tang.

From level 770 (10-11 + T - I17).

376. F1913. Composite knife handle. L. 2.8 cm.

End nearer blade missing.

Handle of oval section with wooden side pieces rivetted either side of iron tang by means of a tubular copper pin.

From level 553 (e16).

377. F1927, Mus 71.193. Composite penknife. L. 9.6 cm.

Blades badly corroded.

Handle consisting of a solid piece of bone, oval in section and slightly tapering; wider end triangular and notched. A rivet at the narrower end serves as a pivot for two iron blades, the longer folding into an incision the full length of the knife along one edge; the smaller blade resting in a shorter incision in the opposite side.
From level 516.

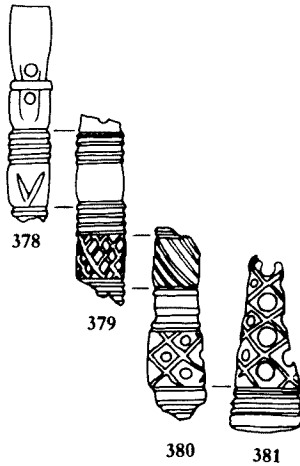
Handles.

A group of objects of uncertain function (nos. 378-383) may have been handles of fly switches or fans; they are carved from bone, leaving the medullary cavity as a hollow lengthwise through the centre, and they are usually decorated elaborately with geometric patterns, sometimes in openwork. Four fragmentary examples appear to have been of the same pattern; complete, one of these would have had two pairs of perforations to secure the working part, hair of switch or feathers of fan, etc. (no. 378); beneath this, several bands of decoration separated by groups of ring mouldings, the first being a plain band (no. 379), then a band of cross-hatching or oblique striations (nos. 379, 380), thirdly a trellis pattern with a perforation through each lozenge producing an openwork effect (nos. 380, 381); and below this, solid bone with a group of incised rings.

378. F630, Mus 71.68. Bone handle (fig. J). L. 5.3 cm.
One end broken.

Hollow fragment of slightly squared section with band of thicker bone separating two pairs of perforations; bands of zigzags below, between groups of incised rings.

From level 657* (-10/11).

FIGURE J. Handles
(not to scale)

379. F631, Mus 7900. Bone handle (fig. J). L. 4.7 cm. Both ends broken.

Hollow fragment with remains of perforation at top and groups of incised rings framing two wider bands: one plain, the other cross-hatched.

From level 449* (*m*7 [+10]).

380. F806, Mus 7872. Bone handle (fig. J). L. 4.8 cm. Ends and half diameter missing.

Hollow fragment with groups of incised rings framing two bands of decoration: oblique striations and an incised trellis pattern with lozenges perforated.

From level 558* (7 [+8]).

381. F634, Mus 7992. Bone handle (fig. J). L. 4.2 cm. One end broken.

Hollow fragment with solid end, encircled by a group of four incised rings. Decorative band above: incised trellis with lozenges containing alternate rows of large and small perforations.

From level 647* (7).

382. F937, Mus 7875. Bone handle (pl. 338). L. 5.8 cm. End broken.

Hollow fragment of circular section, elliptical at complete end. Two perforated nicks towards end; rest of surface decorated with four bands of alternating patterns: spiral encircling shaft fourteen times, and three groups of ten chevrons.

Byzantine.

Provenance unrecorded.

383. F1032, Mus 7860. Bone handle (pl. 339). L. 6.6 cm.

Handle shaped like sleeve and clasped hand; carved from end of bone so that hand is solid but sleeve hollow. Two perforations near edge. Three drilled dot-and-circles on back of hand; sleeve elaborately decorated with central band of incised semicircles linking groups of five dot-and-circles; either side, bands of rings and a row of dot-and-circles. A lozenge enclosing a dot-and-circle at the lower edge of the sleeve may represent the jewel of a bracelet.

From level 1344 (6 [+?]).

384. F412, Mus 7985. Bone tube. L. 6.9 cm.

Tapering cylinder with roughly circular mouth at wide end and elliptical opening at narrow. Perhaps a handle.

From level 558* (7 [+8]).

385. F125, Mus 7882. Bone handle. L. 8.1 cm.

Cylinder elaborately carved as double, fluted column; wide socket at head, fine perforation through length. Perhaps part of a pipe.

From level 902 (–Mod).

386. F1978, Mus 71.189. Bone handle (pl. 340). L. 5.2 cm.

End broken.

Fragment of natural shape, lightly trimmed. Decorated with group of three incised rings towards complete end and two at break. Cf. *Corinth*, no. 1419.

From level 1280* (6–7 [–12]).

387. F386, Mus 7856. Bone handle (pl. 341). L. 6 cm.

Of elliptical section, decorated with drilled dot-and-circles, lightly incised crosses and cross-hatching. Both ends indented for insertion of metal tang of blade or pommel.

From level 1227* (*m*[?]12).

388. F1915, Mus 71.191. Bone handle (pl. 342). L. 6.4 cm.

Ends broken.

Fragment of elliptical section with incised decoration: groups of rings at both ends; main part covered in trellis pattern composed of pairs of diagonally crossing lines.

From level 797* (12).

389. F37, Mus 7979. Bone spoon handle. L. 8.2 cm.

Broken at neck; bowl missing.

Round shaft with flattened spade-shaped terminal; incised line just above neck.

From level 187 (Mod + eT).

390. F1940, Mus 71.194. Bone spoon handle. L. 8.7 cm.

Finial and bowl missing.

Shaft of elliptical section, divided at one end into three tongues to which were originally rivetted the double tongue of a missing wooden or metal bowl. At other end bone cut into two tongues with two bronze rivets still in place, where missing finial attached. Decorated with three bronze-edged cups for inlay, and pins arranged in three arrow-shaped groups.

From level 1461 (Mod, l6 + Mod).

391. F1907, Mus 71.190. Ivory spoon handle. L. 12.2 cm.

Shaft of elliptical section with metal rivet for attachment of missing bowl, or perhaps penknife blade.

From level 1399 (l19-e20).

392. F893, Mus 7980. Bone spoon handle. L. 12 cm.

Of elliptical section with four longitudinal incisions decorating front. Metal plates and tangs at each end for attachment of missing finial and bowl or possibly knife blade.

From level 1299 (l19-e20).

393. F1739, Mus 8027. Composite spoon handle. L. of elements: 5.2 cm, 4.9 cm, 4.8 cm.

Fragmentary.

Three rods of red glass with metal tangs at each end. Perhaps originally a spoon handle, imitation in glass and base metal of coral and gold prototypes.

From level 1274 (m19).

Miscellaneous bone tools.

394. F6, Mus 7886. Bone cleat (pl. 343). L. 7.4 cm.

Slightly waisted bar with rounded ends; at each end a circular hole, the edges showing signs of wear. Front decorated on inner side of each perforation with group of four drilled dot-and-circles.

From level 112* (e6).

395. F632, Mus 7869. Bone cleat. L. 5.4 cm.

Half missing.

Complete end rounded and perforated; edge of hole worn. Front decorated with pairs of drilled dot-and-circles.

From level 449* (m7 [+ 10]).

396. F702, Mus 7991. Horn tool (pl. 344). L. 15.8 cm.

Tine of antler, smoothed throughout length and cut away at lower end. Perhaps used as a tool.

From level 569* (l16 [+ e6]).

397. F413, Mus 7971. Bone tool (pl. 345). L. 7.4 cm.

One end missing.

Shaft of circular section, tapering either side of group of three incised rings; off-centre perforation. Unknown function.

From level 546* (8).

398. F7, Mus 7977. Bone tool (pl. 346). L. 10.8 cm.

Both ends missing.

Turned shaft tapering towards both ends; decorated with bands of incised rings.

From level 773 (l18+).

399. F74, Mus 7978. Bone tool (pl. 347). L. 10.1 cm.

End missing.

Fragment of shaft with two incised rings at head; cross-hatched decoration.

From level 788* (R + 10-11 + e12).

400. F86, Mus 7981. Bone tool (pl. 348). L. 11.3 cm.

Head missing, tip slightly damaged.

Shaft tapering to a point; decorated with incised chevron between spiral bands.

From level 792* (10 + l11/e12).

401. F221, Mus 7873. Bone tool (pl. 349). L. 14.1 cm.

Shaft with knop at head, other end pointed; incised decoration of spiral bands alternating with cross-hatched, plain and diagonal-crossed panels.

Byzantine.

Provenance unrecorded.

402. F856, Mus 7982. Bone tool (pl. 350). L. 10.6 cm.

End missing.

Fragment tapering towards head. Three incised rings at head; shaft decorated with three bands of scratched rings and cross-hatching.

From level 938* (8 [+ - 1/2 12]).

403. F1071, Mus 7893. Bone tool (pl. 351). L. 9.2 cm.

Ends missing.

Fragment of shaft with knopped head formed from two deeply incised rings; decorated with three longitudinal rows of drilled dot-and-circles.

From level 1323* (l11/e12).

Needlework implements.

404. F1674. Bronze spindle hook (pl. 352). L. 3.6 cm.

Strip of metal curled into a conical shape; pointed end bent into a hook, opposite end forming socket to re-

ceive missing spindle shaft. Cf. *Corinth*, nos. 1223-1228.

From level 1378* ($\frac{1}{2}$ 12).

There are no certain spindles from Sarāḥane; it is possible that the bronze spindle hook was originally provided with a wooden shaft and whorl. Some of the bone tools of uncertain use (nos. 399-403) may have been spindle shafts, but of a different hookless type. The thread, instead of being secured round the hook, would have been twisted into a loose knot round the top of the shaft each time a new length was spun; the small mouldings would have prevented the knot from slipping.

Thimbles.

Byzantine thimbles are all of the ring type, like the modern tailor's thimble which leaves the tip of the finger exposed and thus more sensitive to the work. The top opening is always slightly narrower than the bottom; the sides are either straight or convex curved, and the surface is dimpled with a regular pattern of dots framed top and bottom by a plain band or incised lines.

405. F1255. Bronze ring thimble (pl. 353). Ht. 1.9 cm. Diam. 2 cm.

Straight-sided, with vertical rows of dots; two incised lines top and bottom.

From level 1252* (e11).

406. F1079. Bronze ring thimble. Ht. 1.8 cm.

About one-third preserved.

Straight-sided, with alternate bands of vertical and slanting rows of dots; incised line top and bottom.

From level 1222* (10+).

407. F1303. Bronze ring thimble (pl. 354). Ht. 1.6 cm. Diam. 1.9 cm.

Straight-sided with wedge-shaped panels containing alternately slanting rows of dots; plain margin top and bottom.

From level 1213* (e10 [+?]).

408. F1560. Bronze ring thimble. Ht. 1.7 cm.

About one-third preserved.

As above no. 407.

From level 1259* (I10 - $\frac{1}{2}$ 11).

409. F1741. Bronze ring thimble. Ht. 2 cm. Diam. 2.1 cm.

Straight-sided with alternate wedge-shaped and trian-

gular panels containing alternately slanting rows of dots; incised line top and bottom.

From level 1444 (B + m16).

410. F628. Bronze ring thimble. Ht. 1.6 cm. Diam. 2.1 cm.

Curving sides with vertical rows of dots; incised line top and bottom.

From level 594* (7 + 11).

411. F1917. Bronze ring thimble (pl. 355). Ht. 1.8 cm. Diam. 2.2 cm.

Curving sides with wedge-shaped panels containing alternately slanting rows of dots; plain margin top and bottom.

From level 1425* (12).

Needles.

Five types of bronze needle were excavated from Byzantine levels (cf. *Corinth*, p. 173):

A. Head of shaft slightly flattened; end squared. Longitudinal groove on each face narrowing towards shaft; oblong eye punched through groove.

B. Head of shaft flattened; end pointed. Eyelet wheel-cut from both sides to produce a lanceolate perforation; slight groove on each face.

C. Similar to B, but with the shaft more severely flattened so that the head is thinner and wider; end truncated.

D. Head of shaft flattened; end squared. Eyelet seems cut from both sides as in B, but groove visible only on one side; two or three lines engraved above and below eye.

E. Head of shaft slightly flattened; end rounded. Circular eyelet punched.

Bronze needles, type A (412-415).

412. F790, Mus 71.209.

L. 13.6 cm.

From level 560* (m7) (fig. K).

413. F564. L. 8.8 cm. One side of eyelet missing.

From level 560* (m7)

414. F797. L. 9.1 cm. Point missing.

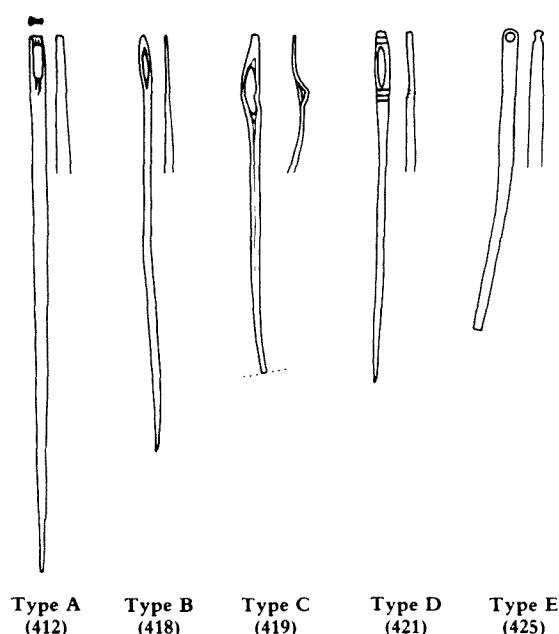
From level 703.

415. F188. L. 5.9 cm. Both ends missing.

From level 704* (-10).

Bronze needles, type B (416-418).

FIGURE K. Needles (scale 1:2)



416. F1182. L. 8.3 cm. Eyelet broken.
From level 1246* (l8/e9).

417. F1533. L. 8.6 cm. Eyelet end missing.
From level 1234* (l10-e11).

418. F959. L. 10.5 cm.
From level 1237* (- 3/212) (fig. K).

Bronze needles, type C (419-420).

419. F1084. L. 8.4 cm. (fig. K). With longitudinal line
incised on both sides.
From level 1242* (l10).

420. F1736. L. 9.1 cm.
From level 1274 (m19).

Bronze needles, type D (421-424).

421. F1995, Mus 71.210. L. 8.8 cm. (fig. K).
From level 1325* (l12 [+?]).

422. F1033. L. 7.9 cm. Eyelet end missing.
From level 1323* (l11/e12).

423. F947. L. 7.4 cm. Eyelet end missing.
From level 1009* (3/412).

424. F846. L. 7.2 cm. Eyelet end missing.
Byzantine.

425. F561. Bronze needle, type E. (fig. K). L. 7.5 cm.
Point missing.
From level 1015* (3/212).

Brass pins (426-431).
Pointed shaft with globular head made from fine coil
of wire.

426. F1792. L. 2.8 cm. End broken.

427. F933. L. 3.6 cm.

428. F881. L. 3.7 cm.

429. F883. L. 5 cm.

430. F901. L. 5.6 cm.

431. F882. L. 14 cm.
From level 1299 (l19/e20).

432. F77. Bronze knitting needle. L. 18.7 cm.
One end broken.
Long shaft tapering to a blunt point at complete end.
From level 359* (- 13).

433. F1678. Bronze cable needle. L. 11.7 cm.
Shaft tapering to blunt point at both ends.
From level 1272* (m[?]11).

Punches or prickers.

These bone pegs may, like their modern counter-
parts, have served a multiple purpose: as an aid to
counting threads in weaving, piercing holes through
cloth in embroidery, or pushing unthreaded yarn or
ribbon through material as in the making of clippy
mats, etc.

434. F1174, Mus 7877. Bone punch (pl. 356). L. 3.6
cm.
Of elliptical section, decorated with three incised rings
at blunt end and four spirals round pointed shaft.
From level 1246* (l8/e9).

435. F1173, Mus 7874. Bone punch. (pl. 357). L. 4.2
cm.
Knopped head with disc-shaped collar; shaft tapering
towards both head and point, two incised rings round
middle. Traces of red staining. Cf. *Corinth*, no. 1263.
From level 1223* (R-10 [+cm12]).

436. F265, Mus 7975. Bone punch. (pl. 358). L. 4.6 cm.
With knopped head and mouldings formed by four in-

cised rings; diagonal striations on shaft. Cf. *Corinth*, no. 1264.

From level 545* (e10 + ½12).

437. F192, Mus 7969. Bone punch (pl. 359). L. 5.7 cm. With knopped head and mouldings formed from six incised rings.

From level 793 (B + T).

438. F1909, Mus 71.186. Bone punch. L. 7.1 cm.

Of oval section crudely cut to a tapering point; three incised lines below neck and one round hemispherical knob.

From level 1408 (m16 [+ l17]).

439. F126, Mus 8004. Bone peg. (pl. 360). L. 2.7 cm.

Of circular section tapering to a point.

From level 857 (l[?]17 [+ Mod]).

440. F1619. Bone tool (pl. 361). L. 9.8 cm.

Flat polished shaft with one end cut obliquely to a blunt point, the other rounded. An incision at the round end parallel to the main faces. Of uncertain function, perhaps used in weaving.

From level 1266* (½13).

441. F415, Mus 7976. Bone netting bobbin. (pl. 362). L. 9.4 cm.

Turned pendant of elongated drop-shape, with incised ring and perforation towards top.

From level 558/9* (7 [+ 8]).

442. F339. Bone spool. L. 4.2 cm.

With turned cylindrical shaft and mushroom-shaped terminals. Perhaps reel for silk. Cf. *Corinth*, nos. 1276-1277, p. 175.

From level 437 (m16).

443. F89, Mus 7970. Bone spool (pl. 363). L. 6.2 cm.

As above no. 442.

From level 83 (18).

Cosmetic and medical instruments.

444. F843, Mus 71.211. Bronze ear or unguent spoon (pl. 364). L. 4.7 cm.

End of handle broken.

Flat, slightly shaped handle, decorated on back with pattern of incised lines and dots. Small hemispherical bowl continuous with handle. Cf. *Corinth*, p. 181.

From level 962* (11 [- 12 +]).

445. F922. Bronze ear spoon (pl. 365). L. 7.5 cm.

Handle of circular section tapering to a point; decora-

tive band of moulded rings towards bowl. Small hemispherical bowl at oblique angle to handle, with four incised lines on back.

From level 1050* (l11-e12).

446. F777. Bronze tool. L. 10.1 cm.

Head disintegrated in cleaning.

Shaft of round section tapering to a point; bead and ring mouldings towards disc-shaped head. Perhaps unguent mixer.

From level 569* (l6 [+ e6]).

447. F1305. Bronze tool or pin. L. 5 cm.

One end missing.

Shaft of circular section tapering towards ends; complete end pointed.

From level 1252* (e11).

448. F498. Bronze spatula. L. 10.7 cm.

Most of blade missing.

Knop finial; shaft of circular section with ringed and knopped moulding at junction with blade. Blade originally similar to no. 449. Cf. *Corinth*, no. 1334, p. 181.

From level 564* (m7).

449. F242. Bronze spatula (pl. 366). L. 16.7 cm.

Knop finial; shaft of circular section with ringed and knopped moulding at junction with blade. Lanceolate dished blade of V-shaped section.

From level 803* (eB + ½12).

450. F1259. Bronze bifurcated probe (pl. 367). L. 5 cm.

Handle and tines broken.

Shaft with bead and ring mouldings; prongs of square section, straight with sharp curve at junction with shaft. Cf. *Corinth*, nos. 1377-1383.

From level 1252* (e11).

451. F925. Bronze handle (pl. 368). L. 5.6 cm.

Working end missing.

Conical finial; shaft elaborately decorated with groups of bead and ring mouldings. Perhaps handle of bifurcated prong or other surgical instrument.

From level 1038 ([B -] 18).

452. F709. Bronze bifurcated implement (pl. 369). L. 4.4 cm.

Tines broken.

Two curved prongs attached to shoulder plate; tang in place of the handle, with side projection curled round at back to produce a conical tube, open only at prong end. Function unknown.

From level 409* (¾24 - e5).

453. F625. Bronze fork (pl. 370). L. 6.9 cm.
Handle of rectangular section with disc finial; attached to three widely spaced blunt tipped prongs.
From level 564* (m7).

454. F1701. Iron fork. L. 8 cm.
Handle and tines broken.
Fragment of four-pronged fork with moulded shaft attached by a tang to a bone handle.
From level 1272* (m[?]11).

455. F1590. Bronze tool (pl. 371). L. 5.9 cm.
Broken away at both ends.
Shaft with bead and ring mouldings at one end, and flat rectangular plate with cutaways at other end. Perhaps surgical instrument. Cf. *Corinth*, nos. 1387-1389.
From level 1158* (l12/e13).

456. F1925. Bronze tool. L. 5.1 cm.
Broken away at both ends.
Shaft of squarish section with plate tapering towards opposite end. Crudely made.
From level 1035* (e10 + ½11).

457. F53. Bronze handle (pl. 372). L. 4.3 cm.
End missing.
Shaft of handle or pin of circular section slightly tapering, with bead and ring mouldings at head. Cf. *Corinth*, no. 1391.
From level 174.

458. F899. Bronze handle. L. 5.1 cm.
End broken.
Of semicircular section, tapering towards broken end. Perforation at complete end.
From level 1301* (l6 - 7 + ½12).

459. F868. Bronze tweezers (pl. 373). L. 5.25 cm.
Flat metal strip bent into shape; decorated with groups of three incised lines at neck and on arms. Cf. *Corinth*, no. 1465.
From level 1381.

Writing equipment.

Byzantine styli from Saraçhane are all of the same pattern: the slender round shaft is pointed at one end and flattened into a triangular blade at the other. The base of the blade is decorated on both sides with an incised diagonal cross between parallel lines. Cf. *Corinth*, nos. 1350-1351, p. 185.

460. F127, Mus 71.208. Bronze stylus (pl. 374). L. 10.4 cm.
From level 861* (10 + l12/e13).

461. F941. Bronze stylus. L. 10.2 cm.
From level 848* (½11).

462. F960. Bronze stylus. L. 8.8 cm.
Triangular blade missing.
From level 845* (½11).

463. F1304. Bronze stylus. L. 8.9 cm.
Corner of blade missing.
From level 1252* (e11).

464. F821. Bronze stylus. L. 6.4 cm.
Point missing.
Decorated with an additional five lines incised on shaft.
From level 942 (l11).

465. F951. Bronze tool. L. 6.2 cm.
Nib with thickened point, cast in one piece with socket; decorative mouldings on front; perforated bar at back. Perhaps used in leather- or poker-work.
From level 1299 (l19/e20).

Balance and weights.

466. F823. Bronze balance pivot (pl. 375). L. 8.2 cm.
Consisting of a small rectangular plate with two long flat prongs, twisted halfway along length so that faces confront; ends perforated to hold absent pivot pin. Projection from top of plate perforated for missing suspension ring. Cf. *Corinth*, no. 1674.
From level 942* (l11).

467. F862. Bronze balance beam (pl. 376). L. 8.7 cm.
Cross-bar with flattened ends perforated for attachment of missing scale-pan threads; arms decorated with incised diagonal lines. Flat tapering indicator projecting vertically from centre of cross-bar with perforation at base for absent pivot pin. Probably belongs with no. 466. Cf. *Corinth*, nos. 1672-1673.
From level 964* (e - m11).

468. F1233. Bronze scale-pan (pl. 377). L. of larger frag. 5.6 cm.
Just over a quarter preserved.
Two fragments of circular plate with scalloped rim and five perforations irregularly placed round the edge. Perhaps holes for suspension strings were originally arranged in three groups of three. Cf. *Corinth*, no. 1678.
From level 1221* (7/e8).

469. F1088. Bronze weight (?) (pl. 378). Diam. 1.3 cm. Wt. 7.60 grams.
Suspension loop missing.
Biconical ball indented top and bottom. Perhaps used as a weight.
From level 1222* (10+).

470. F1261. Bronze weight (pl. 379). Diam. 1.9 cm. Wt. 23.61 grams.
Truncated sphere, unmarked. Cf. *Corinth* nos. 1583-1586.
From level 1252* (e11).

471. F1817. Bronze weight (pl. 380). L. 0.9 cm. Wt. 3.37 grams.
Lozenge-shaped tablet, unmarked. Cf. *Corinth*, no. 1590.
From level 1240* (e11).

472. F1778. Bronze weight (fig. L). Diam. 2.9 cm. Wt. 9.83 grams.
Disc with central perforation and moulded concentric circles on one face.
From level 1272* (m[?])11).

473. F1789. Bronze weight (fig. L, pl. 381). Diam. 3 cm. Wt. 10.09 grams.
Slightly domed disc with central perforation and moulded concentric circles on outer face.
From level 1299 (l19/e20).

474. F796. Bronze bell (pl. 382). Ht. 3.5 cm.
Edge slightly damaged.
Conical 'bell' with suspension loop; turned decoration: incised lines below neck and bordering lower edge. Perhaps originally filled with lead and used as a weight. Cf. *Corinth*, no. 1640.
Provenance unrecorded.

475. F293. Bronze weight. Diam. 1.7 cm. Wt. 7.71 grams.
Surface corroded.
Rough disc with no marks visible.
From level 553 (e16).

476. F1630. Bronze weight. Diam. 1.6 cm. Wt. 6.67 grams.
Rough disc with two incised lines on one face.
From level 1268 (m16).

477. F577, Mus 71.204. Bronze chain and weight (pl. 383). L. of chain 10.8 cm. L. of weight 4.3 cm.
Pear-shaped weight suspended by attachment ring from chain of five figure-of-eight twisted links.
From level 558* (7 [+8]).

478. F176. Bronze disc. Diam. 2.7 cm.
Roughly circular plate with off-centre perforation. Perhaps used as a weight.
From level 1112* (l12/e13)

479. F1981. Earthenware weight. Diam. 9.7 cm.
Makeshift weight: a roundel roughly cut from a terracotta tile; edges chamfered. Two holes representing attempt at perforation and one side broken, perhaps intentionally to facilitate attachment.
From level 341* (2/5).

480. F144, Mus 8015. Earthenware roundel. Diam. 2.8 cm.
Disc cut from sherd of orange pottery, perforated through centre; groove across one face wider and deeper towards the edges. Perhaps used as a weight or pulley.
From level 833* (m12+).

481. M8466. Stone weight. Diam. 12 cm.
One-third missing.
Marble disc with central perforation bored from both sides.
From level 1213* (e10[?]).

482. M9373. Stone weight. Diam. 12 cm.
One-quarter missing.
Marble disc as above no. 481.
From level 1009* (2/12).

483. M8623. Stone weight. L. 8 cm.
Lower part chipped.
Fragment of pear-shaped tablet of marble, with perforation towards top.
From level 1219* (-l12+).

Gaming pieces.

Various shapes seem to have been used as gaming pieces, including natural objects, a knucklebone artificially coloured, and dogfish vertebrae, which were found isolated from any other fish remains. Of the several hundred roundels found at Saraçhane, crudely cut from pottery sherds, many may have been makeshift lids and weights, but some were probably used as gaming counters, particularly the more precisely chipped

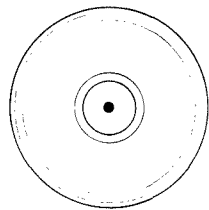
FIGURE L. Bronze Weights (scale 1:1)



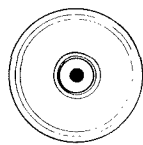
specimens included below. Amygdaloid and hemispherical pieces of ivory were possibly furniture inlays but more probably gaming pieces, the hemispherical type being made in the same way as beading (cut on the lathe as a spherical ball and sawn in half). As well as thick drum-shaped pieces, there are flat counters, mostly decorated with series of concentric circles, moulded on the lathe. Of the four main types, types A and B are so similar to the inlay panels that some of them may be decorative plaques rather than playing counters.

- A. Wide convex band divided from central circle by a narrow ring; double ring at edge.
- B. Wide convex band divided from central circle by a narrow ring; single ring at edge.
- C. Similar to B but counters smaller and mouldings of sharper profile.
- D. Central ring surrounded by concave moulding and numerous narrow concentric circles.

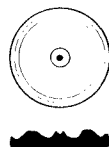
FIGURE M. Counters
(scale 2:3)



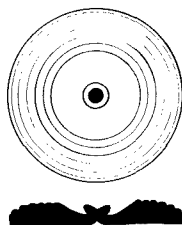
Type A (514)



Type B (521)



Type C (524)



Type D (526)

484. F345, Mus 7865. Bone die (pl. 384). L. 1.2 cm. Cube with number spots represented by drilled dot-and-double-circles, arranged as on modern dice (opposite values adding up to seven). Faint border lines on faces bearing two and five spots.
From level 1281* ($\frac{1}{2}12 + e11$).

485. F1565. Green marble die. L. 1.1 cm. Cube with number spots represented by drilled dot-and-circles, picked out in powdery orange.
From level 1381.

486. F958. Stone marble. Diam. 2.3 cm. Spherical ball of mottled pink and grey marble. Cf. *Corinth*, no. 1758.
From level 1081* ($m?11 [+ \frac{3}{2}12]$).

487. F1904. Stone marble. Diam. 2.3 cm. Spherical ball of white marble.
From level 1397 (e20).

488. F1884. Bone astragalus. L. 2.7 cm. Natural knucklebone, artificially stained green. Cf. *Corinth*, no. 1753.
From level 1011* ($11/12 + \frac{3}{4}12$).

Bone vertebrae (489-491).
Natural vertebra of dogfish, used as gaming piece. Cf. *Corinth*, no. 1707.

489. F1886. Diam. 1.75 cm.
From level 1238* (e11).

490. F1887. Diam. 2.1 cm.
From level 1381.

491. F1885. Diam. 3 cm.
From level 1238* (e11).

492. F1353, Mus 8017. Earthenware counter. Diam. 2.3 cm. Roundel cut from sherd of unglazed, buff-coloured ware, probably later Roman. Cf. *Corinth*, nos. 1729-1736.
From level 1215* (e6 + 11).

493. F1694, Mus 8016. Earthenware counter. Diam. 4.6 cm. Roundel cut from slightly glazed orange-coloured 7th-century plate.
From level 562* (m7, 7/8).

494. F517, 8013. Earthenware counter. Diam. 2.8 cm. Roundel cut from sherd of 8th-century incised ware,

buff body with cream slip on underside and yellow glaze on face.

From level 936* (l10 – e11 [+ m12]).

495. F1604, Mus 8014. Earthenware counter. Diam. 3.1 cm.

Roundel cut from sherd of 10th-century green glazed ware.

From level 1159* (l10 – 11).

Ivory gaming pieces (496–500).

Of amygdaloid shape, with flat back, semicircular section, tapering towards ends.

496. F637, Mus 7997. L. 4 cm.

497. F635, Mus 7999. L. 4.2 cm.

498. F636, Mus 7998. L. 4.2 cm.

499. F755, Mus 8000. L. 4.3 cm.

From level 647* (7).

500. F638, Mus 8001. L. 4.6 cm.

501. F640, Mus 7948. Ivory gaming piece. Diam. 1.7 cm.

Of turned hemispherical shape, with remains of indentation at top produced in turning. Cf. *Corinth*, no. 1691.

From level 647* (7).

502. F639, Mus 7947. Ivory gaming piece. Diam. 1.6 cm.

As above no. 501, with indentation removed by scraping.

From level 647* (7).

503. F752, Mus 8003. Bone gaming piece. Diam. 1.2 cm. Ht. 1.3 cm.

Of drum shape, with slightly moulded top.

From level 647* (7).

504. F465, Mus 7910. Ivory gaming piece (fig. N). Diam. 2.3 cm. Ht. 2.3 cm.

Turned drum shape; slightly domed top with central indentation.

From level 558* (7 [+ 8]).

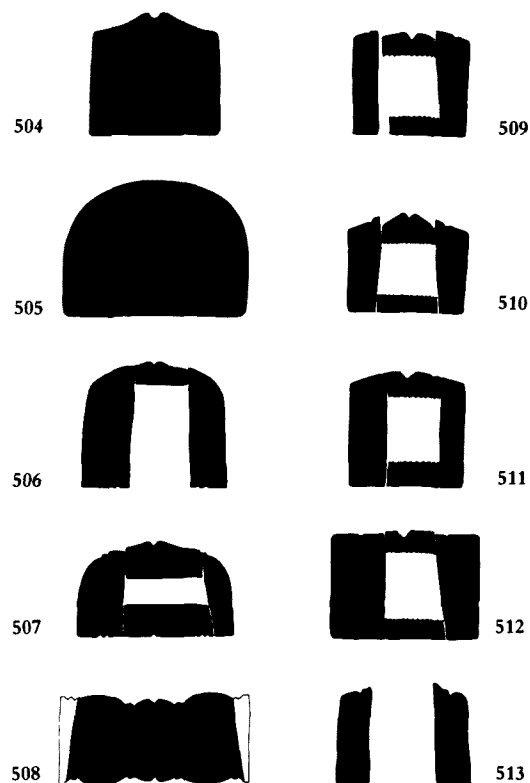
505. F1031, Mus 7940. Ivory gaming piece (fig. N). Diam. 3.5 cm. Ht. 2.5 cm.

Piece missing from side.

Dome-shaped.

From level 1242* (l10).

FIGURE N. Counters (plugs with dotted edges, thickness unknown, scale 2:3)



506. F1300, Mus 7941. Bone gaming piece (fig. N). Diam. 2.7 cm. Ht. 2.4 cm.

Lower plug missing.

Turned drum shape; domed top with central indentation. Two incised concentric circles decorating top and bottom. Medullary cavity plugged. Cf. *Corinth*, no. 1688.

From level 938* (8 [+ – ½12]).

507. F225, Mus 7912. Bone gaming piece (fig. N). Diam. 2.9 cm. Ht. 1.5 cm.

Dome-shaped, decorated as above no. 506. Medullary cavity plugged. Cf. *Corinth*, no. 875.

From level 900 (11 [+ R], – 18+).

508. F897, Mus 7911. Ivory gaming piece (fig. N). Diam. 3.3 cm. Ht. 1.8 cm.

Outer layer missing.

Fragment of drum-shaped piece, top and bottom decorated with series of concentric circles moulded on lathe, similar to those on plaques and type A counters.

From level 564* (m7).

509. F1080, Mus 7907. Bone gaming piece (fig. N).
Diam. 2.3 cm. Ht. 1.9 cm.
Turned drum shape, slightly domed; top decorated with central indentation and lathe cut circle. Medullary cavity plugged.
From level 564* (*m7*).

510. F1526, Mus 7870. Bone gaming piece (fig. N).
Diam. 2.2 cm. Ht. 1.9 cm.
As above no. 509.
From level 1218* (*m7* [+10]).

511. F1172, Mus 7909. Bone gaming piece (fig. N).
Diam. 2.1 cm. Ht. 2.2 cm.
As above no. 509.
From level 1246* (*l8/e9*).

512. F1352, Mus 7942. Bone gaming piece (fig. N).
Diam. 3 cm. Ht. 2 cm.
Turned drum shape; top decorated with central indentation and lathe-cut circle. Medullary cavity plugged.
From level 1255* (*e11*).

513. F834, Mus 7944. Bone gaming piece (figs. N, O).
Diam. 2.5 cm. Ht. 1.9 cm.
Plugs missing from medullary cavity.
Turned drum shape, slightly domed. Decorated with two lathe-drawn concentric circles, remains of colouring in grooves. Pattern of crosses scratched faintly on sides, originally contrasting as white against a stained green ground.
From level 941* (*11* + *-m12*).

514. F711, Mus 7888. Bone counter (figs. M, P, pl. 385). Diam. 3.8 cm.
Disc with turned mouldings: concentric circles, type A.
From level 566* (ca. 520–540, $\frac{2}{3}$ 6).

515. F331, Mus 7922. Bone counter (fig. P). Diam. 3.3 cm.
As above no. 514, type A.
From level 654* (*10* – *11*).

516. F463, Mus 7924. Bone counter (fig. P, pl. 386).
Diam. 2.3 cm.

FIGURE O. Decoration on Counter
(scale 2:3)

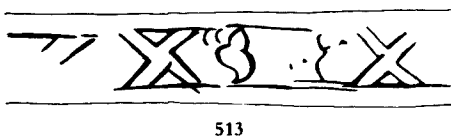
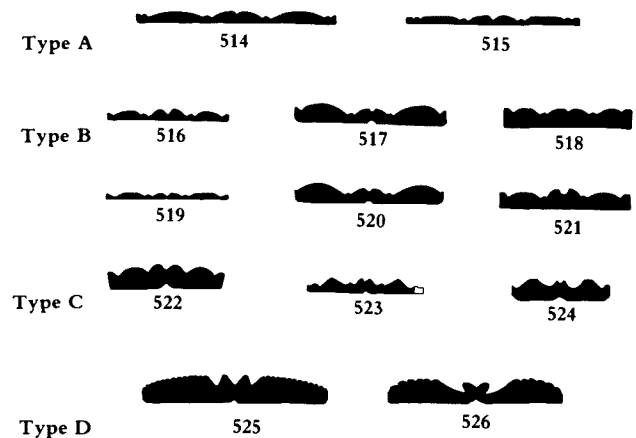


FIGURE P. Counters (scale 2:3)



Disc with turned mouldings: concentric circles, type B.
From level 562* (*m7*, $\frac{7}{8}$).

517. F953, Mus 7925. Bone counter (fig. P). Diam. 2.9 cm.
As above no. 516, type B. Central indentation on back.
From level 1335* (*8* + *11/12*).

518. F1175, Mus 7927. Bone counter (fig. P). Diam. 2.4 cm.
As above no. 516, type B.
From level 1246* (*l8/e9*).

519. F1170, Mus 7923. Bone counter (fig. P) Diam. 2.3 cm.
As above no. 516, type B.
From level 1223* (*R* – *10* [+ *em12*]).

520. F633, Mus 7891. Bone counter (fig. P). Diam. 2.9 cm.
As above no. 516, type B. Incised decoration on front: four long radial lines and groups of shorter. Central indentation on back.
From level 647.

521. F1169, Mus 7926. Bone counter (figs. M, P).
Diam. 2.5 cm.
As above no. 516, type B.
From level 1381.

522. F496, Mus 7928. Bone counter (fig. P). Diam. 2.2 cm.
Edge damaged.
Disc with turned mouldings: concentric circles, type C.
Central indentation on back.
From level 913* ($\frac{2}{3}$ 45 [+ $\frac{1}{2}$ 12]).

523. F1529, Mus 7929. Bone counter (fig. P). Diam. 1.9 cm.

Edge damaged.

Disc with turned mouldings; concentric circles, type C. From level 1218* (*m7* [+10]).

524. F1987, Mus 71.178. Bone counter (figs. M, P). Diam. 1.9 cm.

As above no. 523, type C.

From level 564* (*m7*).

525. F753, Mus 7902. Bone counter (fig. P, pl. 387). Diam. 3.5 cm.

Disc with turned mouldings: concentric circles, type D; central indentation on back.

From level 647* (7).

526. F1933, Mus 71.179. Bone counter (figs. M, P). Diam. 3.3 cm.

As above no. 525, type D.

Provenance unrecorded.

527. F1595. Bone counter (pl. 388). Diam. 2.5 cm.

Roughly cut lentoid, one face decorated with rosette of six incised rays terminating in drilled holes. Cf. *Corinth*, nos. 1697-1698.

From level 1285* (*l10*).

COSTUME ACCESSORIES AND JEWELLERY

Disc buttons.

This group of objects, usually made of bone, occasionally of stone, has certain common characteristics: they are circular with a central perforation and their two faces are differentiated. The fronts are decorated and often slightly moulded, the backs being plain and flat. The majority are probably buttons, but a few may have been spindle whorls; cf. *Corinth*, p. 296.

528. F641, Mus 7921. Bone button (pl. 389). Diam. 1.3 cm.

Crudely cut disc decorated with scratched dots and lines.

Byzantine.

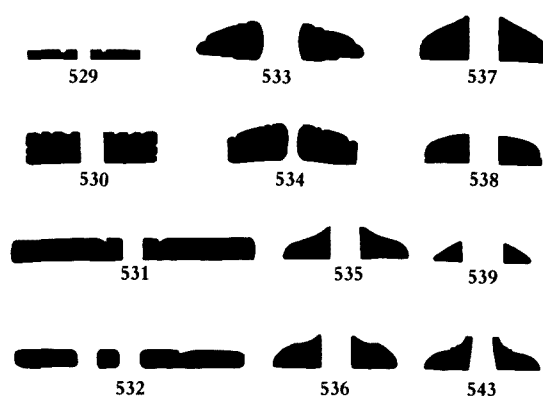
From level 647.

529. F642, Mus 7920. Bone button (fig. Q, pl. 390). Diam. 2.1 cm.

Turned disc, decorated with an incised circle and four radial lines. Cf. *Corinth*, no. 2525.

From level 1005* (*l12* +).

FIGURE Q. Bone Buttons (scale 2:3)



530. F1966, Mus 71.177. Bone button (fig. Q, pl. 391). Diam. 2.5 cm.

Turned disc, decorated with three concentric circles on front, and two incised lines round side.

From level 411 (12 + 17 + – Mod).

531. F466, Mus 7935. Bone button (fig. Q). Diam. 4.6 cm.

Turned disc, decorated with incised circle.

From level 430 (16 ±).

532. F896, Mus 7936. Bone button (fig. Q). Diam. 4.4 cm.

Turned disc, edge slightly bevelled; decorated with incised circle. Second hole adjacent to central perforation, less evenly cut.

From level 1304 (*e16*).

533. F330, Mus 7867. Bone button (fig. Q, pl. 392). Diam. 3.2 cm.

Turned disc with domed front and slightly convex back. Both faces decorated with incised concentric circles, three on front, two on back.

From level 654* (10 – 11).

534. F629, Mus 7903. Bone button (fig. Q). Diam. 2.4 cm.

Turned disc with domed front decorated with three incised concentric circles.

From level 657* (– 10/11).

535. F1832, Mus 71.62. Bone button (fig. Q). Diam. 2.4 cm.

Turned disc with curved front.

From level 1193 (b – 12 + 15/16 + 18/19).

536. F55, Mus 7916. Bone button (fig. Q, pl. 393).
Diam. 2.35 cm.

Disc with curved front decorated at edges with four hatched triangles and pair of incised lines. Traces of red staining.

Byzantine.

Provenance unrecorded.

537. F115, Mus 7914. Bone button (fig. Q, pl. 394).
Diam. 2.4 cm.

Turned disc, domed front decorated with five clusters of radial cuts and lightly scratched line at circumference.

From level 859 (I12/e13 [+18]).

538. F788, Mus 7915. Bone button (fig. Q). Diam. 2.2 cm.

Turned disc, hand-trimmed; domed front decorated round edge with groups of short lines in alternate slanting pairs; incised line round circumference. Traces of red staining.

From level 504 (I15/e16).

539. F108, Mus 7917. Bone button (fig. Q). Diam. 1.9 cm.

Disc with domed front.

From level 910* ($-\frac{1}{2}$ 13).

540. F940, Mus 7919. Bone button. Diam. 1.3 cm.

Turned truncated hemisphere, with two incised lines encircling perforation.

From level 848* ($\frac{1}{2}$ 11).

541. F495, Mus 8005. Bone button (fig. R, pl. 395).
Diam. 2.5 cm.

Half of body and plugs from medullary cavity missing. Domed fragment, turned and decorated with incised dot-and-circles between two triple-ringed bands. Medullary cavity forming horizontal perforation, originally plugged. Cf. *Corinth*, nos. 2584–2587.

From level 372 (I12/e13 [+16–17]).

542. F703, Mus 7878. Bone button (fig. R, pl. 396).
Diam. 2.1 cm.

Plugs missing from medullary cavity.

Turned dome, almost biconical, decorated with band of three incised rings. Medullary cavity forming horizontal perforation, originally plugged. Traces of red staining. Cf. *Corinth*, no. 2588.

From level 501.

543. F143, Mus 7918. Bone button (fig. Q). Diam. 2.2 cm.

Turned disc, front with ogee profile; two incised concentric circles.

From level 132 (16–17+).

544. F103, Mus 8012. Purple serpentine button. Diam. 2.8 cm.

Truncated cone, turned and decorated with lightly incised concentric circles. Cf. *Corinth*, no. 2593.

From level 855* (I12–e13).

545. F1620. Grey serpentine button. Diam. 2.7 cm.

Truncated cone, turned and decorated with one incised circle on base and four concentric circles round sides.

From level 1266* ($\frac{1}{2}$ 13).

Metal buttons.

The most common types of Byzantine bronze buttons are globular, constructed of two hemispherical parts joined, one segment perforated at the pole for the insertion of a wire attachment loop. There are three main types, type A continuing to be made and worn in the Turkish period:

A. Plain spherical.

B. Spherical with a nipple antipodal to the attachment loop.

C. Spheroidal, constructed in the same manner as types A and B, but each segment is less than hemispherical.

546. F75.

Bronze globular button, Type A (fig. S).

Diam. 0.8 cm.

From level 788* (10–11 + e12).

547. F288.

Bronze globular button, Type A (fig. S).

Diam. 1 cm.

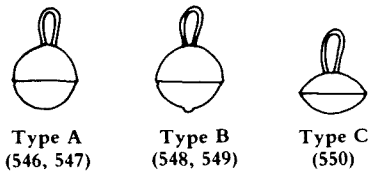
From level 592 (I16).

Seven similar buttons (diam. 0.65 cm to 1.4 cm) were found in 12th- and 16th-century contexts.

FIGURE R. Bone Buttons
(scale 2:3)



FIGURE S. Bronze Buttons (scale 1:1).



548. F1356. Bronze globular button, type B (fig. S).
Diam. 1.1 cm.

Heavier than other examples; and found, when halves separated in cleaning, to contain a bronze pellet.
From level 1336* (-12).

549. F1796. Bronze globular button, type B (fig. S).
Diam. 0.8 cm.
From level 962* (11 [-12+]).

550. F902. Bronze globular button, type C (fig. S).
Diam. 0.6 cm.
From level 1301* (16-7 + 2/12).
Twenty-six similar buttons (diam. 0.7 cm to 1 cm) were found in 11th- to 13th-century contexts.

551. F1256. Bronze button (pl. 397). Diam. 1 cm.
Of flattened globular shape, cast with perforated disc as attachment loop. Face decorated with incised star of thirteen radiating lines. Cf. *Corinth*, nos. 2119-2120.
From level 1213* (e10 [+?]).

552. F290. Bronze button (fig. T). Diam. 1.7 cm.
Loop and opposite half of button missing.
Fragment of globular button, consisting of hollow hemisphere with remains of loop. Exterior decorated with four incised petals, divided by pairs of radiating lines. Cf. *Corinth*, no. 2121.
From level 384* (3/412).

Buckles.

553. F569. Bronze buckle. L. 2.8 cm.
Ring-shaped with waist on one side and thickening to blunt point opposite. Tang of triangular section, fastened round waist by open loop. Cf. *Corinth*, no. 2176.
From level 480* (15-6).

FIGURE T. Bronze Button (scale 2:3)



552

554. F1878. Bronze buckle (pl. 398). L. 3.1 cm.
Roughly semicircular with waist on straight side and thickening to blunt point opposite. Tang of triangular section, fastened round waist by open loop; loop end of tang decorated with three raised bands.
From level 686* (R+10-11).

555. F1880. Bronze buckle. L. 2.1 cm.
As above no. 554. Tang undecorated.
From level 686* (R+10-11).

556. F1984. Bronze buckle. L. 1.9 cm.
Roughly semicircular with straight bar and thickening to a blunt point opposite. Tang of triangular section fastened round bar by open loop.
From level 1042* (6/7+10/e11).

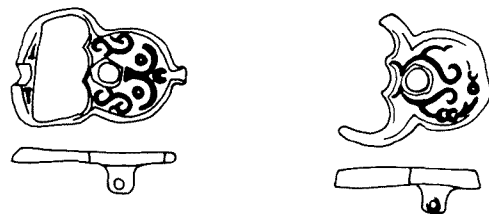
557. F1228. Bronze buckle (pl. 399) L. 1.9 cm.
Of elliptical shape, one side waisted; tang fastened round waist by open loop. Cf. *Corinth*, no. 2178.
From level 1221* (7/e8).

558. F804. Bronze buckle (pl. 400). L. 2.4 cm.
Tang missing.
Rectangular frame consisting of U-shaped bar with ends filed into discs perforated to receive pin. Missing tang originally looped round bar and resting on pin. Cf. W. Deonna, *Exploration Archéologique de Délos XVIII Le Mobilier Délien*, pl. LXXXVIII. 758.
From level 562* (m7, 7/8).

559. F1793. Bronze buckle (pl. 401). L. 2.8 cm.
Rectangular frame consisting of U-shaped element of square section with rounded ends holding pin of circular section. Tang resting on pin and looped round opposite side of frame.
From level 1299 (119/e20).

560. F254. Bronze buckle (fig. U). L. 3.1 cm.
Tang missing.
Elliptical frame and circular plate with side projection cast in one; pair of perforated lugs at back of plate for

FIGURE U. Bronze Buckles (scale 2:3)



560

563

attachment. Recess in frame and perforation in plate to accommodate missing tang. Plate decorated with incised curvilinear pattern. Cf. *Corinth*, no. 2185.
From level 823* (–e6 [+7]–10/11).

561. F170. Bronze buckle (pl. 402). L. 4 cm.
Elliptical frame and circular plate with side projection cast in one; pair of attachment loops at back of plate. Tang of domed section ornamented with cube near base, looped through perforation in plate, point resting on recess in frame.
From level 704* (–10).

562. F1355. Bronze tang. L. 3.1 cm.
Of domed section with rectangular moulding near base containing arched cell. Tubular attachment-loop. Similar to tang of no. 561, but probably attached to buckle by pin in a hinge arrangement.
From level 1215* (e6 + 11).

563. F1924. Bronze buckle (fig. U, pl. 403). L. 3 cm.
Tang and part of frame missing.
Elliptical frame and circular plate cast in one; pair of perforated lugs at back for attachment. Plate perforated to receive missing tang, and decorated with incised curvilinear pattern.
From level 1035* (e10 + ½11).

564. F624. Bronze buckle. L. 2.1 cm.
Tang missing.
Elliptical frame and square plate cast in one; pair of perforated lugs at back for attachment. Plate perforated to receive missing tang and decorated with incised line parallel to edge and three lines at right-angles. Cf. *Corinth*, no. 2212.
From level 571* (6–7).

565. F1532. Bronze buckle (pl. 404). L. 3.7 cm.
Elliptical frame and T-shaped plate cast in one; pair of perforated lugs at back for attachment. Tang looped through perforation in plate, and decorated with cube near base. Cf. *Corinth*, nos. 2209, 2210.
From level 1260* (m[?]10).

566. F129, Mus 71.206. Bronze buckle plate (pl. 405). L. 2.6 cm.
Frame and tang missing.
Rectangular openwork plate with two circular and two rectangular holes. Two perforated projections containing remains of pin, to which rest of buckle originally hinged. Decorated with incised dot-and-circles. Cf. *Corinth*, no. 2217.
From level 564* (m7).

567. F1881. Bronze buckle frame. L. 2.8 cm.
Plate, tang, and half frame missing.
Fragment of frame with two perforated projections from middle of straight side for hinging to missing plate. Decorated with incised dot-and-circles. See above no. 566.
From level 1251* (–112/e13).

568. F253. Bronze buckle (pl. 406). L. 2.3 cm.
Fragment only preserved.
Curved fragment of frame with edges filed. Cf. *Corinth*, no. 2202.
From level 823* (–e6 [+7]–10/11).

569. F783. Bronze buckle. L. 4.3 cm.
Pin and tang missing.
Bow-shaped fragment of frame, square in section. Cf. *Corinth*, no. 2234.
From level 484 (B + 16).

570. F318. Bronze buckle. L. 1.9 cm.
Tang missing.
Frame rectangular on one side and roughly semicircular on the other, with grooved projection to receive tang. Tang originally looped round central cross-bar. Cf. *Corinth*, no. 2203.
From level 435.

571. F390. Bronze buckle. L. 2.7 cm.
Square frame of slightly concave profile, with tang swinging on central cross-bar. Side bars decorated with incised lines.
From level 433 (e16).

572. F766. Bronze buckle. L. 2.2 cm.
One side and tang missing.
Originally as above no. 571.
Provenance unknown.

573. F774. Bronze buckle (pl. 407). L. 3.1 cm.
Rectangular frame of concave profile, decorated with nicked corner projections. Tang swinging on central waisted cross-bar.
From level 495* (e6 + 11).

574. F27, Mus 8006. Bone buckle. Ht. 4.9 cm.
Half frame and tang missing.
Fragment of rectangular frame.
From level 219 (¾16).

575. F1698. Brass buckle. L. 2 cm.

Tang missing.

Rectangular frame with incised lines and a notch on one side in which to rest end of missing tang.

From level 1299 (I19/e20).

576. F904. Brass buckle. L. 1.7 cm.

Broken; tang missing.

As above no. 575.

From level 1299 (I19/e20).

577. F1871. Bronze buckle. L. 2.3 cm.

Fragmentary.

Part of tangless buckle consisting of rectangular frame attached to circular plate with raised edge.

From level 231 (e17).

578. F26. Brass buckle plate. L. 5.5 cm.

Attachment bar and clasp missing.

One plate of clasp buckle with elaborately scalloped outline; incised and rouletted decoration.

From level 205 (Mod).

579. F129. Bronze tangless buckle (pl. 408). L. 2.8 cm.

Openwork plate consisting of an oblong with concave ends and a large ring surmounted by a perforated square. Cf. *Corinth*, no. 2197.

From level 863* (10 + 12).

580. F1795. Bronze tangless buckle. L. 3.5 cm.

As above no. 579.

From level 782 (I12-13 [+ T]).

581. F655. Bronze belt link (?) (pl. 409) L. 3.4 cm.

Object consisting of three interlocked elements: (i) ring and plate with serrated flanges, perforation and socket to contain ii and iii; (ii) ring inserted through centre of i, held in place by peg on iii; (iii) ring with peg to fit socket of i.

From level 577* (7 [+ 7/8]).

Fibulae (cf. *Corinth*, p. 265).

582. F424. Bronze Fibula. L. 3.6 cm.

Wire pin with end twisted into spring round cross-piece; bow undecorated except for incised lines at neck between bow and stem. Grooved section of stem bent under to receive point of pin.

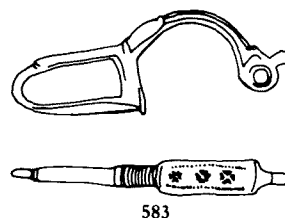
From level 409* (3/24 - e5).

583. F1567. Mus 71.207. Bronze fibula (fig. V). L. 5.4 cm.

Hinged pin missing.

Bow decorated with dotted line along each edge and

FIGURE V. Bronze Fibula
(scale 2:3)



three incised crosses; moulded lines at neck between bow and stem. Grooved section of stem bent under and joined by strut to neck of bow.

From level 1259* (I10-1/211).

Pins.

584. F619. Bronze pin (pl. 410). L. 8.3 cm.

Pointed shaft with end flattened and coiled to form head.

From level 558* (7 [+ 8]).

585. F278. Bronze pin. L. 6 cm.

Pointed shaft with end curled back to form head.

From level 546* (8 + 10).

586. F1552. Bronze pin. L. 6.3 cm.

As above no. 585.

From level 1257* (10 - 11).

587. F1178, Mus 8011. Glass paste pin head. Diam. 1.3 cm.

Shaft broken.

Ball of fawn-coloured glass paste with irregular pattern of white lines. Remains of metal shaft. Probably a pin head but possibly a button.

From level 1249* (- e10).

588. F1354. Bronze pin (pl. 411). L. 3.3 cm. Diam. of head 1.2 cm.

End of shaft missing.

Solid spherical head with shaft of circular section.

From level 1225* (e11).

589. F1945, Mus 71.195. Bone pin head. Diam. 1.1 cm.

Shaft missing.

Turned spherical knob with indentation at top and fragment of shaft projection from bottom.

From level 981.

590. F1950, Mus 78.188. Bone pin. L. 3 cm.

Both ends broken.

Fragment with section of tapering shaft and turned moulding of head.
From level 1391* ($\frac{3}{4}5$).

591. F705, Mus 7974. Bone pin. L. 10.7 cm.
End missing.
Fragment of shaft tapering to a point. Apparently broken in antiquity and the break deliberately grooved for reuse, perhaps as a thread counter or weaving pricker.
From level 566* (ca. 520-540, $\frac{2}{26}$).

592. F1530. Bone pin. L. 6.4 cm.
End missing.
Fragment of shaft tapering to a point.
From level 1261* (*m* [?]10).

593. F983, Mus 7988. Bone pin. L. 9.2 cm.
End missing.
Fragment of shaft tapering to a point.
From level 1219* (-112+).

594. F12, Mus 7987. Bone pin. L. 8.4 cm.
Head and tip missing.
Fragment of shaft tapering to a point.
Byzantine.
Provenance unrecorded.

595. F3, Mus 7880. Bone pin. L. 10.2 cm.
Turned head with elaborate moulding: biconical finial surmounting baluster and ringed elements. Shaft tapering to a point.
From level 752 (RB-18+).

596. F1969, Mus 71. 187. Bone pin. L. 10.2 cm.
Turned head with elaborate moulding: biconical finial, surmounting four rings, knop with band of five dot-and-circles, three rings and collared cylinder. Shaft roughened with diagonal cuts.
From level 415 (-m17).

Ear-rings.

597. F1301. Bronze ear-ring (pl. 412). Diam. 2.6 cm.
Point missing.
Wire strand bent into a ring, complete end attached to ornament consisting of a cube with hemispheres on each side; tops of five hemispheres decorated with small wire rings, the sixth hemisphere (which would rub against right cheek) being plain. A hole in the base of one hemisphere acting as a cup to receive pointed end of ring. For right ear.
From level 1252* (e11).

598. F1574. Bronze ear-ring (pl. 413). Diam. 3.2 cm.
Cup missing.
Wire strand bent into a ring with a point at one end and collar of missing cup at other. Decoration consisting of a hollow ball with collars that the wire perforates; globules arranged like bunches of grapes in two pyramids pendant from the wire, either side of a cross-threaded circlet; above the wire, a single globule either side of a second circlet, also with a vertical cross-thread. Cf. *Corinth*, nos. 2036-2044.
From level 411 (12+17+ -Mod).

599. F110. Bronze ear-ring. Diam. 3.2 cm.
Point and part of ornament missing.
Wire strand bent into a ring, with collar and cup at complete end. Decoration consisting of six globules in pendant pyramid below wire; cross-threaded circlet with single globule either side above.
From level 909* ([?]12).

600. F1679. Bronze ear-ring (pl. 414) Diam. 2.2 cm.
Wire strand bent into a ring, pointed at one end, with an indented knob at the other.
From level 1181* (*m*/12).

601. F468. Bronze ear-ring (pl. 415). Diam. 2.2 cm.
Wire strand bent into a circle, pointed at one end, the other flattened and looped.
From level 931* ($\frac{2}{3}12$).

Beads.

602. F781, Mus 8023. Glass bead. Diam. 1 cm.
Of blue glass; globular with collar.
From level 564* (*m*7).

603. F738, Mus 71.65. Glass bead. Diam. 1.3 cm.
Of black glass with marvered-in white patches and one green spot; globular.
From level 604* (8+e11).

604. F1558A. Glass bead. Diam. 0.7 cm.
Of pale green glass; snail-shaped.
From level 1261* (*m*[?]10).

605. F1558B. Glass bead. Diam. 0.5 cm.
Of blue glass paste; globular.
From level 1261* (*m*[?]10).
Two similar beads from the same context.

606. F1558C. Glass bead. L. 0.7 cm.
Of whitish glass paste; elliptical, slightly flattened.
From level 1261* (*m*[?]10).
One similar bead from the same context.

607. F1831. Glass bead. L. 1.4 cm.
Of blue glass; oblong with flat back and curved front.
From level 1272* (*m[?]*11).

608. F1967. Glass bead. Diam. 1.2 cm.
Of blue glass; disc-shaped.
From level 411 (12 + 17 + – Mod).

609. F1610, Mus 8022. Glass bead. Diam. 0.8 cm.
Of turquoise-coloured glass; globular.
19th century.
Provenance unrecorded.

610. F1788. Glass bead. Diam. 0.9 cm.
Of amber-coloured glass; globular.
From level 1299 (*l19/e20*).

611. F923, Mus 8026. Faience bead. Diam. 1.3 cm.
Of turquoise-glazed pottery; globular with six longitudinal ridges.
From level 1046* (12).

612. F1982, Mus 71.196. Stone bead. L. 1.3 cm.
Of rock crystal; cylindrical with rounded ends.
From level 564* (*m7*).

613. F1695, Mus 71.197. Stone bead. L. 1.7 cm.
Of emerald-green crystal; oblong with elliptical section.
From level 1307* (10 – 11 + 12).

614. F236, Mus 8018. Stone bead (pl. 416). Diam. 1.8 cm.
Of purple serpentine; globular with flattened ends; faintly incised lines round side.
Byzantine.
Provenance unrecorded.

615. F375, Mus 8033. Stone bead. Diam. 0.7 cm.
Of rock crystal; globular.
From level 956 (– 17).

616. F1903. Mother-of-pearl bead. L. 3.8 cm.
Half missing.
Fragment of cylinder with longitudinal perforation.
From level 1397 (*e20*).

Pendants.

617. F1566. Bronze pendant (pl. 417). Ht. 2.7 cm.
Suspension loop missing.
Double-shell shape, with valves slightly open.
Decorated with parallel incisions. Cf. *Corinth*, no. 2114.
From level 1256* (10-11).

618. F708. Bronze pendant (pl. 418). Ht. 2.4 cm.
Suspension loop damaged. Concavo-convex disc perforated through centre. Convex face decorated with two pairs of incised concentric circles and radial lines near edge. Remains of suspension loop decorated with two incised lines.
From level 591.

619. F950. Bronze pendant (pl. 419). Ht. 3.6 cm.
Of inverted crescent shape with suspension loop at right-angles to face. Loop V-shaped with ends pressed together; slight moulding on front between crescent and loop. Cf. *Corinth*, no. 2117.
From level 1310* (*ml12*).

620. F96. Metal pendant. Ht. 3 cm.
Gilded disc with strap-loop.
From level 669 (Mod).

621. F275, Mus 8035. Lead medallion (pls. 420, 421). Ht. 5 cm.
Surface slightly damaged.
Disc-shaped with suspension loop. Decorated with moulded apotropaic motifs and retrograde inscriptions. *Obverse* (A): nimbed horseman to right holding spear; inscription round edge: † ΑΓΙΟC ΑΓΙΟC ΚΥΡΙΟC CA [. . .] ΕΘΗ *Reverse* (B) head *en face* in centre surmounted by a trifurcated sign and surrounded by seven radiating animal heads; inscription round edge: † ΟCΟ [. . .] CEΛΑΗΜ. [. . .] ΛΕΩΝΟΡΟVME Cf. *Corinth*, no. 2102.
From level 384* (3/412).

622. F348. Mus 8034. Lead cross pendant (pls. 422, 423). Ht. 7.7 cm.
Suspension loop missing.
Cross with medallion at end of each arm; drops in corners and flanking medallions. Moulded decoration on both sides; inscriptions in retrograde. *Obverse* (A): Christ crucified with sun and moon above cross; inscription: ΗΔΕΟVCCΟC (ἰδοῦ, ὁ υἱὸς σου); ΗΔΟΜΗΤΡ (ἰδοῦ, ἡ μήτηρ σου) John 19: 26-7. In medallions: frontal busts of four gospel writers, holding books and inscribed: Matthew ΜΑΘΕΟC (below), Mark ΜΑΡΚΟC (left), Luke, inscription illegible (above), John ΙΩΑΝΗC (right). *Reverse* (B): the Virgin standing orans, inscribed: Μ-Ρ ΘV (Μήτηρ Θεοῦ) Frontal busts in medallions: St. Basil ΒΑΧΛΑ (below), two winged and nimbed archangels (left and right), unidentified saint, inscription illegible (above). Cf. *DOP* 21, p. 275, figs. 21-2.
From level 949.

FIGURE W. Lead Cross
(scale 2:3)



623. F387. Lead cross pendant (pl. 424, fig. W). Ht. 4.3 cm.

Badly damaged; one arm and suspension loop missing. Cross with medallion at end of each arm, flanked by two spirals. Moulded decoration. *Obverse*: Christ crucified (feet and robe only visible). *Reverse*: illegible inscription.

From level 1081* ($m?11 [+ \frac{3}{2}12]$).

624. F694. Mus 7959. Bronze cross pendant (pl. 425). Ht. 3.2 cm.

Cross cast with arms of equal length, each swelling towards the end; suspension loop.

From level 1056 ($m12 [+19]$).

625. F235, Mus 7960. Bronze cross pendant (pl. 426). Ht. 3.9 cm.

Cross cast with arm-ends rounded and each decorated with a pair of semicircular protuberances.

Both sides containing circular depressions in centre and rectangular cells in arms. Traces of apple green enamel in cells. Suspension loop.

From level 914* (-12).

626. F1742. Stone pendant (pl. 427). Ht. 3 cm.

Black steatite lozenge with cut outline, openwork and incised decoration: cross with petal-shaped arms, dot-and-circles incised at ends and triangular cuts pointing towards centre; open petals between arms. Perforation for suspension through top of long arm. Cf. *Corinth*, no. 2094.

From level 1073* ($- \frac{2}{2}12$).

627. F1605. Stone cross pendant (pl. 428). Ht. 3 cm.

Arm missing.

Green-grey meerschaum cross, central section cuboid; arms turned with bulbous terminals, one more pointed and larger to accommodate perforation for suspension.

From level 1146 ($m12$).

628. F1092, Mus 71.67. Stone cross pendant (pl. 429). Ht. 2.95 cm.

Pale green meerschaum cross, central section flat. Arms

turned with bulbous terminals, one enlarged to accommodate perforation; button finial above.

Byzantine.

Provenance unrecorded.

629. F810, Mus 7962. Stone cross pendant (pl. 430). Ht. 2.5 cm.

Surface worn; top damaged.

White steatite cross with rectangular arms. Remains of two-way perforation at top. Incised inscriptions. *Obverse*: IC X N K (Ἰησοῦς Χριστός νικᾷ).

Reverse: illegible.

From level 924 (-1900+).

630. F389, Mus 7961. Stone cross pendant (pl. 431). Ht. 1.8 cm.

Green-grey meerschaum cross, with triangular ends to arms; cross-shaped cell probably for inlay. Suspension knob unperforated.

From level 1081* ($m?11 [+ \frac{3}{2}12]$).

631. F376, Mus 7964. Stone pendant (?) (pl. 432). Ht. 1.8 cm.

Top half with suspension loop (?) missing. Fragment of grey-green meerschaum tablet with incised decoration on both sides: border of overlapping arcs; cross with crosslets; inscriptions under arms of cross. *Obverse*: NH K[.] *Reverse*: IH KA, perhaps remains of identical inscriptions: (ICXC) NHKA (Ἰησοῦς Χριστός νικᾷ). Edges decorated with hatched rectangles.

From level 955* ($l10/e11 + \frac{1}{2}12$).

632. F1592, Mus 8036. Composite cross pendant (pl. 433). Ht. 6.7 cm.

Decayed.

Wooden core of cross with remains of thin metal veneer. Arched cell in centre and rectangular cell for inlay in each arm. Top perforated.

From level 1149 (B?).

Reliquary Crosses.

A number of pendants, larger than other crosses, were of hollow construction forming receptacles for holy relics. They were cast in three parts: a pair of reversed plates, each a hollow-backed cross with flanged edges and hinge-knuckles; these fitted together and were attached to a barrel-shaped suspension loop with complementary knuckles. Cf. *Corinth*, pp. 255-6, nos. 2058-2068.

633. F1593. Bronze reliquary cross. Ht. 4.6 cm.

Front plate and suspension loop missing.

Back plate with hinge-knuckles top and bottom; undecorated.

From level 1285* (l10).

634. F1265, Mus 7967. Bronze reliquary cross (pl. 434). Ht. 6.5 cm.

Hinges slightly damaged.

Complete reliquary, with two hollow crosses hinged together and attached to suspension loop. Decoration in low relief: *obverse*: Christ crucified with tablet above. *Reverse*: the Virgin standing orans, on a feathered background; inscription: ΜΗ ΘΥ (Μήτηρ Θεοῦ). The cross contained a relic, which appears to be a small piece of stone.

From level 1252* (e11).

635. F997. Bronze reliquary cross (pl. 435). Ht. 7.1 cm. Back plate and suspension loop missing; hinges damaged.

Front plate with decoration in low relief: the Virgin standing orans; at end of each arm a medallion containing the frontal bust of a bearded saint.

From level 1336* (-12).

636. F1039. Bronze reliquary cross (pl. 436). Ht. 10.9 cm.

Back plate missing.

Front plate hinged to triangular plate with cylindrical suspension loop. Cross decorated with incised dot-and-circles, and inscription: MIXAHA

From level 1336* (-12).

637. F1923, Mus 71.203. Bronze reliquary cross (pl. 437). Ht. 7.8 cm.

Front plate and suspension loop missing.

Back plate, arms terminating in rounded medallions; undecorated. Iron hinge pin at top.

From level 972.

638. F965. Bronze reliquary cross. Ht. 1.3 cm.

Suspension loop only preserved; hinge-knuckles broken.

Fragment of collared barrel-shaped loop.

From level 1009* (3/412).

Bracelets.

No complete glass bracelets were found at Sarachane. The fragments belong to two main types. In type A, a rod of circular section was bent into a hoop, the rod being slightly flattened or squared at the join. With type B, the rod was either circular or square in section, and was twisted into spiral ridges before being bent into a hoop; the spirals stop short of the ends.

Glass bracelets, type A. Cf. *Corinth* nos. 2141-2142 (639-647).

639. F1311, Mus 8028. Black glass. Orig. diam. 6.2 cm.

One-third preserved.

From level 1220* (l8[e9]).

640. F248, Mus 8019. Blue glass. Orig. diam. 6.8 cm.

One-third preserved.

From level 808* (-l10/e11).

641. F1609. Dark blue glass. Orig. diam. 7 cm.

One-quarter preserved.

From level 1379 (11(+16)).

642. F1874, Mus 71.201. Blue glass. Orig. diam. 6 cm.

One-third preserved.

From level 1272* (m[?])11).

643. F1830, Mus 71.200. Blue glass. Orig. diam. 7 cm.

One-third preserved.

End slightly flattened.

From level 1272* (m[?])11).

644. F1680. Pale blue glass. Orig. diam. 7 cm.

One-quarter preserved.

From level 1179* (11-e12?).

645. F1676, Mus 8029. Black glass. Diam. 4.5 cm.

Half preserved.

End slightly flattened.

From level 930* (1/212).

646. F772, Mus 8024. Black glass. Orig. diam. 5 cm.

One-quarter preserved.

From level 706.

647. F932, Mus 830. Black glass. Diam. 6.1 cm.

Just under half preserved.

Byzantine.

Provenance unrecorded.

Glass bracelets, type B. Cf. *Corinth*, nos. 2143-2147 (648-650).

648. F72, Mus 8021. Blue glass. Orig. diam. 7.6 cm.

Under half preserved.

Of circular section.

From level 788* (R+10-11+e12).

649. F1669. Blue glass. Orig. diam. 5.8 cm.

One-third preserved.

Of square section.

From level 1272* (m[?])11).

650. F273, Mus 8020. Blue glass. Diam. 8.7 cm.
Half preserved.

Of square section, the spirals stopping short of one end.

From level 900 (11[+ R], -18+).

651. F1900. Glass bracelet. Orig. diam. 6 cm.

One-quarter preserved; metal decayed to a cream colour.

Of roughly circular section, the inner circumference flattened, the outer ornamented with a series of knobs.
From level 1397 (e20).

652. F1875. Bronze bracelet (pl. 438). L. 5.5 cm.

One end of split bracelet preserved; terminal damaged. Fragment of hoop, circular in section, decorated with incised lines and lozenge. Triangular terminal with impressed pattern of circles and crescents. Cf. *Corinth*, no. 2133.

From level 1272* (m[?]11).

Rings.

653. F23. Brass finger ring with gem (pl. 439). Diam. 2 cm.

Section missing from back of ring.

Ring cast in one piece, the bezel section thickened to contain a cell. Engraved branch pattern on shoulders. Set with square transparent yellowish stone. Cf. *Corinth*, p. 227, type A.

From level 160 (R-Mod).

654. F1181. Bronze finger ring (pl. 440). Diam. 2 cm.
Gem missing.

Single strand of bronze, circular in section, bent into a hoop with ends flattened for attachment of missing collet or gem. Cf. *Corinth*, p. 228, type E, no. 1837.

From level 1246 (l8/e9).

655. F768. Bronze finger ring with gem. Diam. 1.7 cm.
Hoop missing; setting damaged.

Bronze collet set with blue glass disc, pierced through centre by bronze rivet. Hoop perhaps originally *Corinth*, type E.

From level 465* (l5-e6).

656. F1179. Bronze finger ring with gem (pl. 441). Diam. 2.1 cm.

Three strands of bronze wire twisted into a hoop with a circular collet mounted on a disc, soldered over the join. Set with pale blue glass gem (now missing). Cf. *Corinth*, p. 229, type F, nos. 1842-1844.

From level 1223* (R-10(+em12)).

657. F1000. Bronze finger ring. Diam. 2 cm.

Gem missing.

Three strands of bronze wire twisted into a hoop, with ends flattened to receive missing collet. Cf. *Corinth*, type F.

From level 1327* (-l11/e12).

658. F1231. Iron finger ring. Diam. 2 cm.

Almost completely disintegrated.

Fragment of three strands of metal twisted into a hoop.
From level 1249* (-e10).

659. F46. Silver finger ring with gem (pl. 442). Diam. 2 cm.

Collet held between open jaws of two animal heads, whose necks covered in curling manes form the hoop and join at the back in a boss. Collet decorated round edge with plait outlined in gold, and back with curvilinear patterns. Oval gem of green meerschaum inscribed with verse from the Koran, and interlacing: Vema Tevfiki ilâ billah.

From level 275 (½15[+ B]).

660. F870. Bronze finger ring (pl. 443). Diam. 2.6 cm.

Hoop of concavo-convex section, cast in one piece with raised elliptical bezel. Bezel plain, surface silvered. Cf. *Corinth*, p. 229, type G.

From level 920.

661. F1561. Bronze finger ring (fig. x, pl. 444). Diam. 2.2 cm.

Cast hoop of semicircular section, widened and flattened at front to form elliptical bezel with projection each side. Intaglio decoration: dotted border framing enigmatic motif, perhaps a stylized animal. Cf. *Corinth*, p. 229, type H.

From level 1008.

662. F998. Bronze finger ring (pl. 445). Diam. 1.9 cm.

As above, with double projections either side of undecorated bezel.

From level 1219* (-l12+).

663. F240. Bronze finger ring (pl. 446). Diam. 2.3 cm.

Hoop narrow at back, thick at front with bossed dec-

FIGURE X. Bronze Rings (scale 2:3)



661



695

oration. Bezel, a raised disc with indecipherable inscription.

From level 716★ (10 [+ m12]).

664. F698. Bronze finger ring. Diam. 2.2 cm.

Two-thirds preserved.

Fragment of thick band with groove producing impression of a double ring. Cf. *Corinth*, p. 229, type I.

From level 503★ (6 + l11/e12).

Bronze rings. Cf. *Corinth*, p. 230, type J. (665-679).

This type of ring, consisting of a simple undecorated hoop, comes in all sizes from all periods. Some included in this section are obviously too large to have been finger rings; and others of suitable size may equally have served a utilitarian rather than an ornamental purpose.

665. F767. Diam. 4.7 cm.

Of circular section.

From level 610★ (8).

666. F518. Diam. 3.8 cm.

Of pentagonal section, cast and filed.

From level 564★ (m7).

667. F1890. Diam. 3.4 cm.

Of square section, cast and filed.

From level 688★ (3/26).

668. F695. Diam. 3 cm.

Of circular section.

Byzantine.

Provenance unrecorded.

669. F497. Diam. 2.5 cm.

Of roughly circular section, cast and filed.

From level 562★ (m7, 7/8).

670. F1589. Diam. 2.4 cm.

Of roughly square section, cast and filed.

From level 1285★ (l10).

671. F364. Diam. 2.4 cm.

Of roughly circular section, cast and filed.

From level 1226★ (e11 [+ 12]).

672. F707. Diam. 2.4 cm.

Of roughly circular section.

From level 948 (l17-1/218).

673. F1972. Diam. 2.3 cm.

Of circular section.

From level 1441 (l16).

674. F741. Diam. 2.1 cm.

Of irregular section.

From level 1059 (3/212 [+ 18/19]B + 17).

675. F1556. Diam. 2.1 cm.

Of circular section.

From level 1234★ (l10 - e11).

676. F1901. Diam. 1.8 cm.

Of squarish section.

From level 1397 (e20).

677. F226. Diam. 1.5 cm.

Of roughly circular section.

From level 990 (1/417).

678. F1876. Diam. 1.4 cm.

Of squarish section.

From level 94 (B + 15 + 16).

679. F775. Diam. 1.35 cm.

Of circular section.

From level 560★ (m7).

Bronze split rings. Cf. *Corinth*, p. 230, type K (680-683). Hoop consisting of thin band of metal bent into a ring with ends overlapping.

680. F1085. Diam. 1.6 cm.

Decorated with two incised lines.

From level 1240★ (e11).

681. F261. Diam. 2.1 cm.

From level 367 (l16 + ca. 1200).

682. F1677. Diam. 2.1 cm.

From level 1156 (10 + [15 - 16]).

683. F1588. Diam. 1.8 cm.

One end wider and flatter than other.

From level 1285★ (l10).

Bronze split rings, of circular section (684-692).

684. F1882. Diam. 3.9 cm.

With thin wire wound round hoop near overlap.

From level 1041★ (m12 +).

685. F1936. Diam. 2.2 cm.

Hoop flattened either side of split.

From level 1454 (e16 [+ l16]).

686. F910. Diam. 2.1 cm.

Byzantine.

Provenance unrecorded.

687. F739. Diam. 2 cm.
From level 1061* ($\frac{1}{2}$ 12 [$\frac{3}{2}$ 12]).

688. F40. Diam. 2 cm.
From level 297 (18–19?).

689. F1086. Diam. 2.1 cm.
Perhaps a link.
From level 1240* (e11).

690. F177. Diam. 2 cm.
From level 1112 (I12/e13 –ca. 1200 + I15/e16).

691. F778. Diam. 1.9 cm.
Perhaps a link.
From level 1061* ($\frac{3}{2}$ 12).

692. F1357. Diam. 1.7 cm.
Perhaps a link.
From level 1336* (–12).

693. F599. Bronze split ring. Diam. 3.5 cm.
Hoop consisting of a thin sheet rolled into a tube, one end tapering; tube curved into a circle, the tapered end inserted into the other.
From level 1015* ($\frac{3}{2}$ 12).

694. F999. Bronze finger ring (pl. 447). Diam. 2.1 cm.
Hoop with circular bezel. Serrated edge to bezel and border of tangential saw-cuts. A gem may originally have been cemented at the centre, but cf. *Corinth*, p. 231, type 0 (?).
From level 1323* (I11/e12).

695. F601. Bronze finger ring (fig. x, pl. 448). Diam. 2.5 cm.
Narrow hoop with circular bezel. Intaglio design: dotted border framing nimbed saint with head in profile to left; inscription illegible.
From level 564* (m7).

Archers' thumb rings.

Archers' thumb rings are known from Byzantine contexts (cf. *Corinth*, p. 233, no. 1998); they continued to be used in the Turkish period. Made of various materials, they all swell to a peak on one side, and were intended to be worn on the thumb, enabling the archer to use only the thumb and forefinger in drawing the bowstring, which gave greater range and accuracy since the feathers on the arrow could be set closer to the nock.

696. F342, Mus 7945. Ivory thumb ring (pl. 449).
Diam. 3.2 cm.
From level 516 (I16).

697. F257, Mus 7890. Ivory thumb ring. Diam. 3.8 cm.
From level 598 (ca. 1600).

Gems.

Glass gems (698–700).
Hemispherical buttons of glass may have been cemented onto bezels to serve as ring gems, or may have been made as gaming counters. Cf. *Corinth*, p. 223, nos. 1780–1801.

698. F728, Mus 8031. Diam. 1.4 cm.
Of blue glass.
From level 647* (7).

699. F280, Mus 8032. Diam. 1.1 cm.
Of turquoise glass.
From level 369 ($\frac{1}{4}$ 6 [+ ca. 1200]).

700. F1594, Mus 8009. Diam. 2.4 cm.
Of blue glass.
From level 1285* (I10).

Stone gems (701–703).

F749. A hoard of fifty-seven shaped gems of white marble, amethyst, and quartz was found, partly embedded in a conglomerate of hardened earth and bronze. The latter may represent all that survives of an original mounting; more probably it is coincidental and the unmounted gems composed a store intended for later use in the decoration of holy book covers, reliquaries, or other items of church furniture.

701. Twenty-four white marble gems. L. 1.5–1.9 cm.
Tear-shaped, of semicircular section. Domed fronts more highly polished than backs.

702. Fourteen amethyst gems. L. 1.2–1.8 cm.
Roughly oval; both faces domed, one sometimes more than the other, with a sharp edge between. Polished.

703. Nineteen amethyst and quartz gems. L. 1.2–1.8 cm.
Some roughly oval, others of more irregularly rounded forms, the majority having at least one wheel-cut groove. Polished.
From level 558*/9 (7 [+ 8]).

Seals.

704. F578, Mus 7966. Glass seal (pl. 450). Ht. 1.7 cm. One-third missing.

Fragment of opaque turquoise-coloured glass; flat elliptical shape with bevelled edge. Design in intaglio on obverse: Hermes carrying caduceus; standing on double base-line to right, wearing winged boots, drapery swinging from bent right arm, wand held in right hand and bag in left. Heron on left standing with head turned back. Inscription on reverse: ΓΑΓΑΞ.

Greco-Roman.

From level 647* (7).

705. F928, Mus 7965. Stone scarab (pls. 451, 452). L. 1.6 cm.

Half missing.

Fragment of green jasper scarab, with details of body incised and legs of beetle in relief. Design engraved in intaglio on front: on left, a hawk-headed god with sun-disc on head, standing to right; lower part of woman seated to left, with arm folded on breast; top of winged sun-disc above and cross-hatched exergue.

Egyptian.

From level 930* (1/212).

706. F17. Brass seal (pls. 453, 454). Diam. 1.3 × 1.8 cm.

With oval face, moulded stem, and loop handle. Engraving of a rose with stems curving from it, bearing smaller leaves and flowers, forming a background to the inscription: Husseyin bin Mustafa. Cf. *Corinth*, no. 2685.

From level 155 (17-19).

ANIMAL FITTINGS

Bird rings.

A standard set of bird rings seems to have consisted of two collared rings of different widths and two identical narrow bands. They were probably intended to be worn asymmetrically, the widest, most decorative ring encircling one leg, and the bands arranged either side of the second collared ring on the other.

707. F191. Bone bird rings (pl. 455). Diams. 1.2-1.3 cm.

Set of three rings: (i) turned collared ring with groove round middle, (ii-iii) two narrow turned rings of triangular section. Found on bird's leg-bone.

From level 893 (3/417).

708. F190, Mus 7953. Bone bird ring (pl. 456). Diam. 1.5 cm.

Turned collared ring, decorated with groove and ten drill-holes round middle. Found on bird's leg-bone. Perhaps same bird as no. 707.

From level 893 (3/417).

709. F1606. Bone bird rings. Diams. 1.3-1.4 cm.

Set of three rings: (i) turned collared ring with groove and seven drill-holes round middle; (ii) turned collared ring with groove round middle; (iii) narrow turned ring of triangular section. Found together. Possibly a second narrow ring would have completed the original set.

From level 893 (3/417).

710. F34, Mus 7952. Bone bird ring. Diam. 1.7 cm.

Collared ring, roughly carved and decorated with three rows of drilled holes.

From level 219 (3/216).

711. F1171, Mus 7989. Bone bird ring (?). Diam. 1.2 cm.

Narrow band.

From level 1223* (R-10[+em12]).

712. F887, Mus 7995. Bone bird ring. Diam. 1.3 cm.

Narrow band.

From level 1299 (I19/e20).

Harnesses and horse shoes.

Only a few pieces of metal can be identified with any certainty as parts of harnesses for horse, mule, or ass, though some of the miscellaneous rings and buckles included in other sections may originally have been attached to trappings. About ninety horse shoes were found, of various sizes, the majority probably too small to have belonged to horses, and may rather have been worn by mules and asses. Like the rest of the ironwork, many of the shoes are fragmentary, all are corroded, and only occasionally are details preserved. Most were excavated from 15th- to 17th-century levels, a few were found in later contexts, and one small, featureless shoe, indistinguishable from the Turkish examples was associated with 11th-century material.

713. Iron bit. L. 15.5 cm.

Corroded.

Two elliptical hoops connected by bolt-link; the bolt head through a perforation in the side of one ring, the other end bent into a loop interlinking with the second; two annulets encircling the bolt-shafts.

From level 1440 (I16+18-20).

714. Iron bit. L. 8.5 cm.

Fragment; corroded.

Circular hoop with bolt-link; the bolt head through a perforation in the side of the ring, the other bent into a loop for interlinking with missing second hoop.

From level 415 (*m17*).

715. Iron bit. Diam. 6 cm.

Fragment, corroded.

Circular hoop with perforation at one side for insertion of missing bolt-link.

From level 411 (12 + 17).

716. Iron ring. Diam. 6 cm.

Corroded.

Circular hoop, probably part of horse bit or bridle.

From level 680 (10[+ ?] – 18).

717. Iron ring. Diam. 4.8 cm.

Corroded.

Circular hoop, probably part of horse bit or bridle.

From level 415 (*m17*).

718. Iron horse shoe. L. 12 cm. W. 8 cm.

Corroded.

U-shaped plate wider at ends and swelling to a slight point at bend; small flanges either side and three nails for attachment to hoof, one at each end, a third on the bend. Length of shoe greater than width.

From level 1292 (*l16*).

719. Iron horse shoe. L. 5 cm. W. 7.3 cm.

Corroded.

Shallow U-shaped bar of even width, triangular calkin at each end. Rectangular nail on bend for attachment to hoof. Width of shoe greater than length.

From level 1292 (*l16*).

720. Iron horse shoe. L. 4 cm. W. 5.5 cm.

As above no. 719.

From level 1292 (*l16*).

721. Iron horse shoe. L. 8.5 cm. W. 9 cm.

Corroded.

Bar of even width, U-shaped with ends converging slightly, triangular calkin at each end. Three round nails on bend for attachment to hoof. Width of shoe greater than length.

From level 299 (*R-l16*).

722. Iron horse shoe. L. 7 cm. W. 8.5 cm.

As above no. 721

From level 1430 (*B + e16[+ 19]*).

723. Iron horse shoe. L. 6 cm. W. 7 cm.

As above no. 721.

From level 420 (*e16-17/18*).

MISCELLANEOUS ITEMS

Figurines, church furniture, moulds, etc.

724. F1990. Earthenware figurine (pl. 457). Ht. 6.9 cm.

Feet and end of tail missing.

Standing rooster of pale orange clay with mat surface; mould-made in two reverse halves crudely stuck together, the joint trimmed with a knife.

From level 1293 (*l15/e16 + l19*).

725. F1911. Glass bird's head (pl. 458). L. 4.5 cm.

Broken at neck.

Fragment of duck's head in pale greenish-brown transparent glass, with eyes of opaque orange; beak open. Broken from figurine or vessel. Probably Venetian.

From level 1415 (17-18).

726. F1230, Mus 8037. Silver liturgical spoon (figs. Y, Z, pl. 459). L. 14 cm.

Consisting of shallow oval bowl, flat pear-shaped handle, and knop finial. Niello decoration on front of handle: cross with flaring arms and drops at corners, encircled by quatrefoil foliate stem with alternating ivy-leaf-and-tendrils. Back of bowl faintly incised with feathery leaf markings. Cf. *DOP* 22, p. 199.

From level 1221* (*7/e8*).

727. F1828. Shell sprinkler (pl. 460). L. 6.2 cm.

Outer edge broken away.

Fragment of slightly curved shell with mother-of-pearl on both faces; circular perforations.

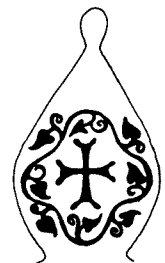
From level 558* (*7[+ 8]*).

FIGURE Y. Silver Spoon
(scale 1:3)



726

FIGURE Z. Detail of Niello
Decoration (scale 2:3)



726

728. F798. Bronze cross (pl. 461). L. 8.2 cm.

Plate with vertical arms missing.

Horizontal arms of cross, consisting of a flat plate with flaring ends. Perforation through centre for rivetting to second missing plate, the latter with holes for attachment to background. Cf. *Corinth*, p. 198, no. 1507.

Provenance unrecorded.

729. F696, Mus 8008. Glass inlay (?) L. 2.1 cm.

Ends chipped.

Oval marble of green glass; perhaps originally an inlay for one of the peacock's eyes (cf. chapter 5, 1 e i-iii).

Provenance unrecorded.

730. F2000. Earthenware tile. L. 17.7 cm.

Half preserved.

Fragment of rectangular tile of pinkish buff clay. Graffito incised on smooth side after firing: pattern of concentric rectangles with cross lines.

From level 1173* (2/11/e12).

731. F973. Earthenware bread stamp (pls. 462, 463).

Diams. of faces 4.9 cm. and 8.5 cm.

Chipped.

Stamp of grey pottery consisting of two discs of different sizes back to back so that one acts as handle to the other. Patterns cut after firing. *On smaller face* (A): incised circle divided by cross with gouged quadrants. *Reverse* (B): incised circle divided by two lines crossing each way and the resultant squares subdivided diagonally; each triangular section gouged. Cf. *Corinth*, p. 331, nos. 2854-2855.

From level 1238* (e11).

732. M3878. Stone quern. L. 61 cm.

Quern of Proconnesian marble, oblong with rough surface.

From level 665 (B + T[-18]).

733. F1681. Stone mould (pl. 464). L. 10.3 cm.

Corresponding half-mould missing.

Limestone half-mould for casting seal blanks (bullae). Rectangular block, outer face with rounded edges and central square depression. Inner face containing four circular depressions of different sizes, each with a central indentation; hollow at the top with channels linking the circles; two parallel grooves through the circles for the insertion of wire rods (cf. below no. 734). No trace of peg or socket to assist alignment of mould with missing half, but two small holes on one side for wires to hold the parts together. Cf. *Corinth*, nos. 2828-2831. From level 1272* (m(?)11).

734. F884. Lead bulla (pl. 465). Diam. 1.9 cm.

Seal blank in shape of disc with ridge diametrically across each face, pierced by fine perforation, the latter made by placing a metal rod in the mould during casting. This bulla is of the better quality intended to be used for sealing documents, the fastening cord being threaded through the perforation. Cf. P. Grierson "Byzantine Gold Bullae" *DOP* 20 (1966), p. 239; *Corinth*, no. 2826.

From level 1299 (I19/e20).

735. F274. Lead seal (pls. 466, 467). Diam. 2.9 cm.

Obverse (A): Monogram with ΤΩ CΩ[Δ]ΟΥΛΩ in quarters, (κ[υ]ρ[ι]ε] β[ο]ήθη τῷ σῶ [δ]ούλῳ.) *Reverse* (B): CTAV/PAKHΩ/ΝΩΤΑ/ΡΗΩ in four lines (Σταυρακήωνωταρήω).

From level 546* (8).

736. F372. Lead seal (pls. 468, 469). Diam. 2.5 cm.

Obverse (A): Monogram with [ΤΩ CΩ]/ΔΟΥΛΩ in quarters, (κ[υ]ρ[ι]ε] β[ο]ήθη [τῷ σῶ] δούλῳ.) *Reverse* (B): ΜΟ/ΧΟΝΑ/ΑΜΗΝ in three lines (Μ(?)οχονᾶ ἀμήν); in exergue, cross and pellets.

From level 546* (8).

737. F462. Lead seal. Diam. 2.2 cm.

Fragmentary.

Both sides illegible.

From level 562* (7/8).

738. F401. Lead seal (pls. 470, 471). Diam. 2.8 cm.

Obverse (A): Facing bust of St. Theodore Stratelates, bearded, wearing nimbus and military attire, holding spear in his right hand and shield in left; to left, ΦΘΕ; to right ΟΔ . . . (ὁ ἄγιος Θεόδωρος). *Reverse* (B): ΘΕΟΔΩΡ, / ΑΨΠΙΑΘ/ . . . ΝΟΜ, ΤΩΝ/ . . . ΑΓ, ΣΑΝ/ . . . ΑΦ, ΠΑ/ΦΛΑΓ, ΤΩ/ΚΑΡ, Μ, in seven lines, (Θεοδώρ(ω)/ (πρωτο)σπαθ(αρίω), οἱ/κοινόμ(ω) τῶν/ [εὐ]αγ(ῶν) (καὶ) ἀν/[αγρ]αφ(αί) Πα/φλαγ(ονίας) τῷ/ Καρ(μ)μ(άλλω)).

739. F266. Lead seal (pl. 472). Diam. 2.5 cm.

Obverse: Motif indistinct; perhaps facing bust wearing nimbus and holding spear. *Reverse*: Illegible.

From level 545* (e?10 + 1/212).

740. F33. Lead seal (pl. 473). Diam. 2.4 cm.

Obverse: Illegible. *Reverse*: Illegible inscription in four lines.

From level 295 (-19/20).

741. F20. Lead seal (pls. 474, 475). Diam. 2 cm.

Obverse (A): Saint and emperor standing, facing, hold-

ing between them labarum; saint (on left) nimbate and wearing military attire; emperor wearing crown. Inscription illegible. *Reverse* (B): Two standing figures, facing, holding between them long cross; figure on left perhaps saint; figure on right probably wearing crown. Inscription illegible.

From level 213* (–13).

742. F1959. Stone mould. L. 7.5 cm.

Half missing.

Fragment of coarse limestone block with remains of two rectangular depressions containing incised herringbones; channel giving access to central rib of pattern.

From level 678 (Mod).

743. F297. Bronze mould frame. Ht. 10.4 cm.

Frame in two stirrup-shaped parts, three tangs on one

half having corresponding sockets on the other. Probably a sand-mould for casting small metal objects.

From level 553 (e16).

744. F906. Lead bottle seal. Diam. 5.9 cm.

Circular cap with stamp in relief on upper surface: obscure central emblem surrounded by inscription and border of stylized foliage. Inscription almost illegible: INA·A originally reading THERICA·FINA·AL· and referring to the contents of the jar and the manufactory of fine theriac (Venice treacle). Probably Venetian, although theriac was made in Constantinople. Cf. *Corinth*, nos. 2833–2839, pp. 315–6 and references, for discussion of date and the use of theriac as a cure for plague and a universal panacea.

From level 1299 (l19/e20).

Chapter Twelve

THE COINS

M. F. HENDY

AS THE FIRST fully published body of numismatic material from major and controlled excavations within the capital, the coins from Saraçhane possess an enhanced interest and importance. On the other hand, because they derive from a single relatively confined site inside the walls, the question must inevitably arise as to what extent they are typical of the capital as a whole, and to what extent they reflect the peculiarities of the history of the church of St. Polyeuktos and its immediately surrounding district. The point is, methodologically, a not uninteresting and unimportant one in its own right, and it is therefore in this respect that the body of numismatic material from the sister site of Kalenderhane, a bare half-mile away to the East, and also shortly to be published, assumes an equal interest and importance. For only in comparing each series against the known or probable architectural and occupational history of its site, and then in comparing the two series against each other, will the detection of similarities and dissimilarities between them allow an assessment of the degree to which they represent a particular pattern, and of that to which they represent a general one. And even that assessment will be a very tentative and preliminary one. In other words, much remains to be done before the history of the metropolitan circulating medium becomes at all clear.

Because the Saraçhane coin series, for the moment at least, makes full numismatic sense only when compared with Kalenderhane, a detailed analysis of the two, and of at least one other small series known to the writer, will be more appropriately made elsewhere, a brief account and analysis only being attempted here.

The series consists of 1,042 late Roman and Byzantine coins, of which 891 are identifiable with some degree of certainty and form the basis of the detailed catalogue (nos. 1-891). There are some 151 others which are identifiable only within a very approximate chronological bracket (nos. A892-1042). There were in addition 115 unidentifiable fragments.

All the coins are of base metal, which is a normal feature of excavation material. Most were found singly, but a significant number were found either fused together or in such close proximity as to suggest an original association.

The fused coins were as follows:

502, 543-557	Fused group of 16
542, 576-577, 751	Fused group of 4
567-571	Fused group of 5
572-575	Fused group of 4 (w. cloth impression)
770, A1035, A1038	Fused group of 3
854, 868-875, 877	Fused group of 10 (in purse?)

Various other groups of coins are also detectable in the catalogue from their coincidence or near-coincidence of dating, and of place and date of discovery, but again, if they were not noticed to be associated then, the reconstruction of groups is now no more than hypothetical.

The series opens with a restrained number of fourth- and fifth-century coins (nos. 1-35). This restraint presumably reflects the fact that between 324 and 413 the site lay towards the edge of the city, although it is to be noted that probable fifth-century architectural remains have been identified on the site.

The earliest concentration of coins concerns the reigns of Anastasius I (491-518) and Justin I (518-27), there being no pieces (single nummi) of the former's pre-reform period (491-8). The coins of the post-reform period (498-518) involve both folles and their fractions (nos. 36-150). The dominant fraction present is the eighth-follis or pentanummium. All this is very much as might be expected if the major church was being built in 524-27, and it may well be that the workforce was either being paid in pentanummia, or that it was at any rate using them.

Perhaps the most important single coin is no. 153, a pre-reform follis of Justinian I (527-65), from the make-up for the atrium floor. This coin, then, dates

from 527-38/39, at the widest possible chronological bracket, and it suggests that at least some final work stretched into the earliest phases of Justinian's reign, as indeed might be expected.

The series continues, in a more or less consistent manner, that is with no obvious fluctuations, throughout the sixth century and on into the seventh. It is to be noted that the mint of Constantinople is overwhelmingly the dominant one represented, with a consistent minor representation from the submetropolitan mint of Nicomedia, and (perhaps surprisingly) an occasional one only from the other submetropolitan mint of Cyzicus, and (less surprisingly) from the more distant mints of Thessalonica, Antioch, and even Carthage.

What is quite clear is that the diminution in, or actual interruption of, the coin series, which stretches—very approximately—from the later phases of the reign of Heraclius (610-41) to the reign of Theophilus (829-42), and which is standard for provincial sites (whether Balkan or Anatolian), does not occur in the metropolis. This is in itself, of course, not unexpected, but it is useful to have suspicions or expectations confirmed. Instead, even the large 'reformed' folles and fractions of Constantine IV (668-85, nos. 411-425), and the otherwise rare coins of the several short reigns marking the late seventh century and early eighth (Leontius, 695-8, and Tiberius III, 698-705; and Philippicus, 711-13, Anastasius II, 713-15, and Theodosius III, 715-17; nos. 432-438, 441-446) are all represented, in however small quantities.

What also happens, of course, is that the representation of the fractions of the follis tends to diminish, as the weight, and presumably value, of the follis itself declines, and the issue of its fractions becomes correspondingly inconvenient and even meaningless. The reign of Constantine IV marks only a brief interruption of this trend.

In its representation of late-eighth- and ninth-century numismatic material, that is pieces of the iconoclast emperors, Saraçhane is extraordinarily atypical, and it is difficult to know how to account for this. The reign of Leo III (717-41) is moderately represented (nos. 447-458), but, with the admittedly long reign of Constantine V (741-75), the beginnings of a rapid process of accentuation is noticeable (nos. 459-479), and with the short reign of Leo IV (775-80) the process is established (nos. 480-523). The iconophile reigns of Constantine VI and Irene (780-802 in their various permutations) are noticeably more restrained in their representation (nos.

524-536), but with that of Nicephorus I (802-11) the accentuated representation is once more evident (nos. 537-604). Leo V (813-20), Michael II (820-9), and Theophilus (829-42), are all reasonably or well represented (nos. 605-616, 617-636 and 637-676, respectively), and not until Michael III (842-67), is there a hiatus. This latter is admittedly unsurprising, as no coins of his sole reign (842-66) are in any case known, but it is also noticeable that the well-known (if scarce) coins with a Latin inscription and dating from his joint reign with Basil (866-7), do not put in an appearance.

The representation of eighth- and ninth-century numismatic material is, then, extraordinary, and there is no explicit evidence at all, and very few circumstantial clues, to suggest why this should be so. Given the normal state of coins recovered from archaeological sites, and the coins from Saraçhane are no different in this way, it is difficult to be certain, but it does seem that the surface condition of many of the coins of the period is remarkably fresh, even where they are otherwise badly corroded. It would, even so, be impossible to say that their condition was mint-fresh. It does, nevertheless, seem clear that the overwhelming majority of the coins involved derive from narthex contexts, and particularly from the narthex substructures, and also that the coins involved include a high proportion of the total of pieces found fused together. Coins of other periods, both earlier and later, also demonstrate a heavy concentration amongst narthex contexts, but not such an overwhelmingly predominant one, and they are less likely to be found fused together. What the numismatic evidence suggests, therefore, is that something quite different from what had preceded it, and what was to succeed it, occurred in the occupational history of the church during the Iconoclastic period. It is in this respect interesting, and also possibly significant, to note that the systematic disfigurement of the representations of human features evident in the surviving carved stone decoration has been ascribed to the Byzantine rather than to the Ottoman period, and this suggests that it too is likely to have occurred during the reigns of the Iconoclast emperors.

All in all, therefore, and however tentatively, one must ask whether it is not possible that the church was not being used for ecclesiastical purposes during the Iconoclastic period, although whether this was because it had simply fallen into disuse, or whether it was because it had been deliberately 'secularised,' remains—and will remain—entirely unknown. Such a secularisation would not be at all inconsistent with the known

policies of the Iconoclasts (and particularly with those of Constantine V), although this tells us nothing as to the particular alternative purposes to which the church was put. It is, after all, even conceivable that it was used as a state store for small change, and matériel.

The fact that, of thirty-six specimens of Theophilus' 'Class 3' design (nos. 641-676), twenty-four (nos. 641-664) are of the variety generally recognised as metropolitan, and four only (nos. 673-676) are of the varieties recognised as provincial, confirms the distinction. Equally, the fact that the remaining six (nos. 665-672) are coins that are generally recognised as metropolitan half-folles renders it likely that they are just that, and not provincial folles on a variant and reduced weight-standard, as has been suggested.

The coin series continues uninterruptedly on into the Macedonian period, with heavy representations for Leo VI (886-912) (nos. 693-736), and for Constantine VII (913-59 in its various permutations) (nos. 737-798). The 'anonymous bronze' coinage, struck from the reign of John I (969-76) to that of Alexius I (1081-92 [-1118]), is reasonably well represented (nos. 800-839), at least in its earliest phases (A1/2: ca. 970-1030/5). What is very noticeable is that, whereas the coins of the period Basil I-Nicephorus II (i.e., 867-969) continue the narthex-dominated pattern of occurrence of the preceding period, those of the period John I-Alexius (i.e., 969-1092) dramatically show a much more general pattern. What this shift in balance means, with regard to the occupational history of the church, remains as obscure as that which preceded it. It is not at all impossible that the church was transferred back to ecclesiastical usage under John I, whose piety (however much reinforced by the circumstances of his accession) was even then remarked upon.

The latest major phase of the coin series involves the Comnenian and Angelan dynasties, or the period stretching roughly from 1092 to 1204. The two denominations represented are the billon trachy, and the billon (metropolitan) or copper (provincial) tetarteron and half-tetarteron. It is very noticeable that the representation of the trachy tends to increase as the twelfth century proceeds. For Alexius I ([1081-] 1092-1118) there are no such coins; for John II (1118-43) there is a single coin only (no. 851); for Manuel I (1143-80) there are three coins (nos. 858-860); for Isaac II (1185-95)

there are ten coins (nos. 868-877), although admittedly a hoard seems to be involved; and for Alexius III (1195-1203) there are three coins (878-880). There seems little doubt that what is involved in this case is, not the occupational history of the site, but rather the decreasing silver content and value, and the corresponding quantities issued, of the denomination itself. As the value declined, so did the care exercised in handling it: as value decreased, quantities lost increased.

The occurrence of the tetarteron and half-tetarteron is also of interest and possible significance, not so much as regards its value, but more as regards its mint-origin. For Alexius, there are seven such coins (nos. 843, 845-850), of which one is from the metropolitan mint, and six are from the Thessalonican one. For John II, there are six such coins (nos. 852-857), two from the metropolitan mint, and four from Thessalonica. For Manuel I (1143-80), there are six such coins (nos. 861-866), three from the metropolitan mint, and three from the Thessalonican/Uncertain Greek mints. In other words, even in the capital, the role of the metropolitan tetarteron was fairly restricted, although possibly increasing, and that of the provincial tetarteron and half-tetarteron was predominant. This reflects not the purely ceremonial role of the metropolitan piece, as has been suggested, but simply the huge scale of provincial production.

The latest phase of the coin series involves nine trachea of the Latin imitative coinage (nos. 881-889). These, very noticeably, are weighted in favour of the metropolitan mint (six coins) and against the Thessalonican one (two coins), there being one coin only of the small-module varieties. Equally noticeably, all the coins, with the exception of one only, belong to the earlier types of the sequence (Cpl. types A-E, Thess'ca types A, C), the single exception being a specimen of type U. This balance, together with the fact that there are only two later coins (nos. 890, 891), of John III(?) (1222-54), and Michael VIII (1258-82), suggests that by ca. 1225 the site was in ruins and/or deserted.

It is finally to be noted that there are no coins of the Bulgarian imitative coinage from the site, which is to be expected.

To the catalogue of Late Roman and Byzantine coins below is appended a list of the few Ottoman coins recovered in the excavations.

Saraçhane Coin Catalogue

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
MAXIMIAN (285-305) Uncertain Mint						
1 [F303]	3.01	22	IMPCMAMAXIMIANVS[Bust, rad., r.	CONCORDIAMILITVM Emp. and Jupiter stg.; between and beneath $\frac{\epsilon}{\chi\chi\Gamma}$	285-c.94	395*
DIOCLETIAN (284-305) Heraclea						
2 [F377]	2.60	20	IMPCCVALDIOCLETIANVS PFAVG Bust, rad., r.	CONCORDIAMILITVM Emp. and Jupiter stg.; between HE	c.295-98 RIC.13/21	314*
Cyzicus(?)						
3 [F24]	2.78	20	IMPCCVALDIOCLETIANVS PFAVG Bust, rad., r.	]RDIA MILITVM Emp. and Jupiter stg.; between KA(?)	c.295-99 RIC.16a	132
CONSTANTINE I (307-337) Constantinople						
4 [F438]	1.97	18	CONSTAN[]VSMAXAVG Bust, laur., r.	GLORIAEXERCITVS Two soldiers stg.; between two stan- dards; beneath, CONS(?)	330-35 LRBC. 1005/10	549*
Nicomedia						
5 [F305]	1.66	18	VRB[]OMA Bust, helmeted, l.	Wolf and twins; beneath, .CONSE.	330-35 LRBC. 1022	394*
Cyzicus						
6 [F311]	1.42	13	CONSTANTINVS MAXAVG Bust, diad., r.	GLORIAEXERCITVS Two soldiers stg.; between, two stan- dards; beneath SMN(?)	330-35 LRBC. 1116/17	394*
Cyzicus						
7 [F319]	2.75	18	CON[]TI[Head, laur., r.	PROVIDENTIAEAVGG Camp-gate, two towers, *, beneath SMK	324-30	395*
Cyzicus						
8 [F308]	1.31	18	VRBS ROMA Bust, helmeted, l.	Wolf and twins; beneath,]MKΔ	330-35 LRBC. 1231/2 1247/8 1259	395*

THE CATALOGUES

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
Antioch						
9 [F307]	2.38	18	CONSTAN TINVS AVG Head, laur., r.	PROVIDEN TIAE AVG Camp-gate, two towers, *, beneath ANT	324-30 LRBC.1333	395*
LICINIUS (308-324) Uncertain Mint						
10 [F572]	1.69	18	IMP C VAL LICIN[] AVG Bust, rad., r.	Jupiter stg., to r. ^x _{IN}	318-24	449*
CONSTANTINE II (Caes.) (317-337) Constantinople						
11 [F334]	1.36	12	CONSTANTINVS IVNNOB C Head, laur., r.	Two soldiers stg.; between two stan- dards; beneath] ON[	330-35	402*
Cyzicus						
12 [F320]	1.98	16	CONSTANTINVS IVNNOB C Bust, laur., r.	GLOR IA EXERC ITVS Two soldiers stg.; between, two stan- dards; beneath * SMKA	330-35 LRBC.1252	399*
CONSTANTIUS II (Caes.) (324-337) Cyzicus						
13 [F322]	1.94	17	] IVL CONSTANTINVS [	Two soldiers stg.; between, two stan- dards; beneath,] KA	330-35	397
CONSTANTIUS GALLUS (Caes.) (351-354) Constantinople						
14 [F723]	3.28	20	DN FL CL C Bust, r.	FELTEMPRE Falling horseman; to l. .S.	351-54 LRBC.2038	609
VALENS (364-378) Constantinople						
15 [F504]	2.29	17	DN VALENS P F AVG Bust, diad., r.	GLORIA RO MANORVM Emp. adv. r. dragging captive; to l.*; to r. O; beneath CONST	367-75 LRBC.2091	319



SARAÇHANE COIN CATALOGUE

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
VALENTINIAN II (375-392) Constantinople(?)						
16 [F1956]	0.90	13	]VALENTINIANVS PFAVG Bust, diad., r.	Victory adv. 1. (Salus Reipublicae type)	383-92	418
17 [F406]	1.38	14	]ALENTINIAN[	Victory adv. 1. (Salus Reipublicae type)	383-92	559*
THEODOSIUS I (379-395) Constantinople						
18 [F30]	1.79	19	DNTHEODO SIVS PFAVG Bust, diad., r.	CONCOR DIAVGGG Constantinople std. facing; to 1.0; beneath CONSA	379-383 LRBC.2128	206*
19 [F929]	1.08	12	DNTHEODO SIVS PFAV[	Victory adv. 1. (Salus Reipublicae type); to 1. ♀; beneath]co[	393-95 LRBC.2192	1299
Uncertain Mint						
20 [F317]	1.70	20	DNTH[	]RIA]R[Emp. stg. (Gloria Romanorum type)	379-95	395*
ARCADIUS (383-408) Constantinople						
21 [F737]	1.05	14	DNARCAD Bust, diad., r.	SALVSREI Victory adv. 1; to 1. ♀; beneath CONS[	393-95 LRBC.2193	611*
Nicomedia						
22 [F1248]	1.06	14	DNARCA[]VS PFAVG Bust, diad., r.	VOT Within wreath; V beneath SMNA	383 LRBC.2385	1330*
Cyzicus						
23 [306]	1.29	12	DNARCADIVS PFAVG Bust, diad., r.	SALVSREI PVBLICAE Victory adv. 1.; to 1. ♀; beneath SMKA	383-95 LRBC. 2570/78	395*
24 [F313]	1.16	14	DNARCADIVS PFAVG Bust, diad., r.	SALVSREI PVBLICAE Victory adv. 1.; to 1. ♀; beneath SMK[	383-95 LRBC. 2570/78	394*




THE CATALOGUES

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
Uncertain Mint						
25 [F1947]	1.51	17	DNARCADI vs[Bust, diad., r.	Emp. stg. crowned by Victory (Virtus Exerciti type)	395-408	1391*
26 [F1519]	0.76	13	DNARC[Bust, diad., r.	SALVSREI Victory adv. 1.; to 1.†	383-95	1368
27 [F346]	1.21	12	]NARCA[Bust, diad., r.	Victory adv. 1. (Salus Reipublicae type)	383-95	262*
HONORIUS (393-423) Constantinople						
28 [F587]	4.96	21	DNHONORIVSPFAYG Bust, diad., r.	GLO[]OMANORVM Emp. stg.; beneath CONSA	393-5 LRBC.2188	563*
29 [F1747]	1.98	16	DNHONORI VSPFAYG	VIR[]E[Emp. stg. crowned by Victory; beneath CONS(?)	395-408 LRBC.2206	1381
Uncertain Mint						
30 [F432]	1.51	14	DNHONOR[Bust, diad., r.	Two figs. (Virtus Exerciti type?)		564*
THEODOSIUS II (402-50) Constantinople(?)						
31 [F1518]	0.84	11	]ODOSIVSPF[Bust, diad., r.	Cross within wreath	425-50 LRBC.2234/38	1235*
32 [F880]	0.59	12 2 pc		Cross within wreath	425-50 LRBC.2234/38	1299
33 [F701]	0.54	10	Bust	Cross within wreath	425-50 LRBC.2234/38	503*
MARCIAN (450-457) Constantinople						
34 [F1521]	0.60	9	Bust, diad., r.	Monogram in wreath(7-9) Beneath,]ON[?	450-57 LRBC.2247/50	1149
35 [F1291]	1.34	10	Bust, diad., r.	Monogram in wreath(6)	450-57 LRBC.2247/50(?)	1252*




SARAÇHANE COIN CATALOGUE

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
ANASTASIUS I (491-518) PRE-REFORM Constantinople(?)						
			Bust, diad., r.	Monogram in wreath		
36 [F455]	0.59	9			491-98 DOC.15.1-8	563*
37 [F662]	0.91	10			491-98 DOC.15.1-8	573
38 [F878]	0.44	7			491-98 DOC.15.1-8	1040*
39 [F1641]	0.64	7			491-98 DOC.15.1-8	1184*
40 [F1767]	0.46	8			491-98 DOC.15.1-8	1278
POST-REFORM Constantinople Follis						
			DNANASTA SIVSPPAVG Bust, diad., r.	 Above, cross, in ex. con		
41 [F91]	8.66	23	DNANASTA SIVSPPAVG		498-512 DOC.16a.1-8	6
			As previous As previous	 Above, cross; to l. and r. stars; in ex. con		
42 [F393]	10.56	24		Stars ✱, beneath A (?)	498-512 DOC.20a.1(?)	1227*
43 [F663]	9.50	24	DNΛ[s[]PPAVG	Stars ✱, beneath B	498-512 DOC.20b.1-6	566*
44 [F217]	8.79	26	DNANASTA]IVSPPAVG	Stars ✱, beneath Δ	498-512 DOC.20d.1-2	933




THE CATALOGUES

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
45 [F927]	7.72	22	DNANASTA SIVSPPAV[+ on diadem(?)	Star to l. ✱, to r.(?), beneath € (?)	498-512 DOC.20e.1-6(?)	1029*
			As previous As previous	As previous As previous		
46 [F131]	17.88	37		DNANASTA SIVSPPAVG Star to l. ✱, to r.(?)	512-18 DOC.23a.1-g.4(?)	713*
47 [F656]	14.74	35	]NAST[]SPPAV[	Star to l. ✱, to r. ☾, beneath €	512-18 DOC.23m.1-3	1280*
48 [F1753]	13.91	33	DNANASTA SIVSPPAVG	Stars ✱, beneath € (?)	512-18 DOC.23j.2(?)	1276*
			Half-follis DNANASTA SIVSPPAVG Bust, diad., r.	 To l. cross		
49 [F201]	4.09	22	]SIVSPPAVG		498-512 DOC.18.1-7	898
50 [F529]	4.12	17			498-512 DOC.18.1-7	647*
51 [F1477]	2.20	20			498-512 DOC.18.1-7	1261*
52 [F1761]	3.88	20			498-512 DOC.18.1-7	1278
			As previous As previous	 To l. cross		
53 [F1942]	8.93	26	]NA[]IVSPPAV[	To r. Γ	512-18 DOC.24d.1-3	1205
54 [F1249]		28	]NAN[]STA SIYSPPAY[+ on diad.	To r. Δ	512-18 DOC.24e-f.2	1381
			Decanummium DNANASTA SIVSPPAVG Bust, diad., r.	 To l. ICON, to r. CORD		


SARAÇHANE COIN CATALOGUE

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
55 [F113]	1.56	16	]NANA[		498-512 DOC.19a.1-e	859
			Pentanummium DNANASTA SIVSPPAVG Bust, diad., r. 			
56 [F122]	2.33	13	]SIVSPP[	To r. A	512-18 DOC.26a.1-4	Unre- corded
57 [F519]	1.85	15	DNAN[]PA[	To r. A	512-18 DOC.26a.1-4	647*
58 [F945]	1.53	14	]IVSPPA[	To r. A	512-18 DOC.26a.1-4	1316*
59 [F1232]	1.26	11	]STA SIVSPP[	To r. B	512-18 DOC.26b.1-4	1220*
60 [F1888]	2.12	13	DNAN[]PPA[	To r. B	512-18 DOC.26b.1-4	688*
61 [F118]	2.02	13	DNAN[	To r. Γ	512-18 DOC.26c.1-4	114
62 [F533]	2.10	13	DNANA[]SPPA[	To r. Γ	512-18 DOC.26c.1-4	647*
63 [F481]	1.65	14	DNAN[]SIVSP[	No pellets, to r. Γ	512-18 DOC.--	564*
			Nicomedia Half-follis DNANASTA SIVSPPAVG Bust, diad., r. 			
64 [F400]	2.61	20	DNAN[]SPP[	To r. cross between N and I	498-512 DOC.31.1-2	292*
			Pentanummium DNANASTA SIVSPPAVG Bust, diad., r. 			
65 [F1213]	1.39	15/13 2 pc	DNAN[]VS[	To r. N	512-18 DOC.44.1-2	1221*

THE CATALOGUES

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
66 [F1399]	1.08	10			512-18 DOC.44.1-2	1215*
			Antioch(?) Follis DNANASTA SIVSPPAVG Bust, diad., r.	 Above, to l., to r., crosses, in ex. ANT X		
67 [F1857]	14.21	14	]A[	Crosses above, and to l., to r.(?), beneath Γ (?), in ex.] N[	512-18 DOC.45b(?)	686*
			JUSTIN I (518-527) Constantinople Follis DNIVSTI NVSPPAVG Bust, diad., r.	 Above, cross, to l. and r. stars, in ex. CON		
68 [F659]	12.92	30	DN[]VSTI	Stars✱, beneath B	518-27 DOC.8b.1-2	1280*
69 [F1012]	13.75	29	]TI NVSPPA[	Stars✱, beneath B	518-27 DOC.8b.1-2	1240*
70 [F1430]	14.53	30	]IYSTI NVSPPAYG	Stars✱, beneath Δ	518-27 DOC.8d	1218*
71 [F99]	17.55	30	DNIVSTI NVSPPAVG	Stars✱	518-27 DOC.8a.1-d	729
72 [F1330]	11.11	31	N[	Star to l.✱, to r.(?)	518-27 DOC.8a.1-d	1255*
			Pentanummium DNIVSTI NVSPPAVG Bust, diad., r.			
73 [F1104]	2.58	13	NV[	To r. B	518-27 DOC.18b	1223*
74 [F669]	1.86	11	NVSPPAVG	To r. Δ	518-27 DOC.18c.1-2	569*

SARAÇHANE COIN CATALOGUE

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
75 [F1769]	1.63	13	NVSPPAVG	Above and below trans- verse bar pellets, to r. B	518-27 DOC.19c.1-2	1278
76 [F344]	2.21	13	]SPPAVG	Above and below trans- verse bar pellets, to r. B	518-27 DOC.19a-c.2	261*
			As previous As previous	 To r. E		
77 [F426]	1.65	11		To 1. A (?)	518-27 DOC.21a.1-6(?)	564*
78 [F677]	1.72	12		To 1. A	518-27 DOC.21a.1-6	569*
79 [F1373]	2.48	14		To 1. A	518-27 DOC.21a.1-6	1215*
80 [F1631]	1.50	14	DNIVS[	To 1. A	518-27 DOC.21a.1-6	1268
81 [F1768]	2.21	13		To 1. A	518-27 DOC.21a.1-6	1278
82 [F1787]	1.71	12		To 1. A	518-27 DOC.21a.1-6	566*
83 [F286]	1.79	12		To 1. B (?)	518-27 DOC.21b.1-7(?)	384*
84 [F358]	1.80	13		To 1. B	518-27 DOC.21b.1-7	715*
85 [F421]	1.07	12		To 1. B	518-27 DOC.21b.1-7	563*
86 [F429]	1.49	13		To 1. B	518-27 DOC.21b.1-7	564*
87 [F514]	1.53	19		To 1. B	518-27 DOC.21b.1-7	634*
88 [F516]	1.77	13	]TI NVSPAV[	To 1. B	518-27 DOC.21b.1-7	634*

THE CATALOGUES

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
89 [F521]	2.31	14	NVSPPA[	To 1. B	518-27 DOC.21b.1-7	647*
90 [F608]	2.26	13		To 1. B	518-27 DOC.21b.1-7	559*
91 [F660]	2.28	13		To 1. B	518-27 DOC.21b.1-7	497*
92 [F761]	2.31	12		To 1. B	518-27 DOC.21b.1-7	1065*
93 [F1110]	1.92	13		To 1. B	518-27 DOC.21b.1-7	1246*
94 [F1246]	2.58	14		To 1. B	518-27 DOC.21b.1-7	1323*
95 [F1599]	2.26	12		To 1. B	518-27 DOC.21b.1-7	1265
96 [F1838]	1.46	12		To 1. B	518-27 DOC.21b.1-7	686*
97 [F1946]	2.06	13	DNIVSTI	To 1. B	518-27 DOC.21b.1-7	1391*
98 [F1808]	1.90	15	DNIVST[]VSPPAVG	To 1. Γ	518-27 DOC.21c.1-3	1281*
99 [F151]	1.83	14	NVSPP[	To 1. Δ	518-27 DOC.21d.1-5	702*
100 [F427]	1.38	13	DNIV[]PPAVG	To 1. Δ	518-27 DOC.21d.1-5	564*
101 [F617]	1.62	14	]NVSPPAVG	To 1. Δ	518-27 DOC.21d.1-5	564*
102 [F978]	1.59	14		To 1. Δ	518-27 DOC.21d.1-5	1219*
103 [F1450]	2.00	15	]NVSPPAVG	To 1. ✱	518-27 DOC.21e.1-4	1215*
104 [F680]	1.78	12		To 1. and r. of verti- cal shaft pellets, to 1. A	518-27 DOC.22a.1-b.2	569*




SARAÇHANE COIN CATALOGUE

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
105 [F1837]	0.93	12		To l. and r. of verti- cal shaft pellets, to 1. B	518-27 DOC.22a.1-2	686*
106 [F1063]	1.59	13		To l. and r. of verti- cal shaft pellets, to 1. Γ	518-27 DOC.22b.1-2	1222*
107 [F1374]	2.25	12	NVSPP[	To l. and r. of verti- cal shaft pellets, to 1. Δ	518-27 DOC.22a.1-b.2	1258*
108 [F1444]	1.16	13	DNIVST[	To l. and r. of verti- cal shaft pellets, to 1. Δ	518-27 DOC.22a.1-b.2	1215*
109 [F1014]	2.06	14			518-27 DOC.21a.1-e.4	1219*
110 [F403]	2.34	13			518-27 DOC.21a.1-e.4	559*
111 [F410]	1.86	12			518-27 DOC.21a.1-e.4	559*
112 [F435]	3.39	13	]IVSTI		518-27 DOC.21a.1-e.4	564*
113 [F482A]	1.77	12			518-27 DOC.21a.1-e.4	564*
114 [F489]	2.26	12			518-27 DOC.21a.1-e.4	564*
115 [F492]	0.90	11			518-27 DOC.21a.1-e.4	564*
116 [F493]	1.73	12			518-27 DOC.21a.1-e.4	564*
117 [F494]	2.01	13			518-27 DOC.21a.1-e.4	564*
118 [F512]	1.76	13			518-27 DOC.21a.1-e.4	565*
119 [F520]	1.90	13			518-27 DOC.21a.1-e.4	647*



THE CATALOGUES

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
120 [F541]	1.90	12			518-27 DOC.21a.1-e.4	647*
121 [F576]	1.46	12			518-27 DOC.21a.1-e.4	560*
122 [F588]	1.70	13			518-27 DOC.21a.1-e.4	488
123 [F605]	1.35	13			518-27 DOC.21a.1-e.4	1117*
124 [F613]	1.29	13			518-27 DOC.21a.1-e.4	559
125 [F679]	2.16	12			518-27 DOC.21a.1-e.4	569*
126 [F681]	2.52	13			518-27 DOC.21a.1-e.4	569*
127 [F699]	1.81	14			518-27 DOC.21a.1-e.4	503*
128 [F1200]	1.92	11			518-27 DOC.21a.1-e.4	1221*
129 [F1212]	2.19	12			518-27 DOC.21a.1-e.4	1221*
130 [F1215]	2.04	13			518-27 DOC.21a.1-e.4	1221*
131 [F1367]	1.75	12			518-27 DOC.21a.1-e.4	1215*
132 [F1416]	1.87	11			518-27 DOC.21a.1-e.4	1218*
133 [F1448]	1.54	11			518-27 DOC.21a.1-e.4	1215*
134 [F1472]	1.48	13			518-27 DOC.21a.1-e.4	1261*
135 [F1839]	1.03	11			518-27 DOC.21a.1-e.4	686*




SARAÇHANE COIN CATALOGUE

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
136 [F1842]	1.18	12			518-27 DOC.21a.1-e.4	686*
137 [F1854]	1.17	12			518-27 DOC.21a.1-e.4	686*
138 [F1855]	0.43				518-27 DOC.21a.1-e.4	686*
139 [F1860]	1.87	13			518-27 DOC.21a.1-e.4	686*
140 [F555]	1.96	12			518-27 DOC.21a.1-e.4	647*
141 [F1861]	0.70	11		To l. and r. of verti- cal shaft pellets	518-27 DOC.22a.1-b.2	688*
<p style="text-align: center;">Nicomedia Follis</p> <p>DNIVSTI NVSPPAVG  Above cross, to Bust, diad., r. 1. and r. stars, in ex. NIKM</p>						
142 [F1197]	14.85	31	DNIVSTI NVSPPA[on diadem	Stars*, beneath A	518-27 DOC.29a.1-2	1221*
<p style="text-align: center;">Half-follis</p> <p>As previous  To l. cross As previous between N and I</p>						
143 [F674]	8.40	25	DNIVST[NVSPPAVG	To r. A	518-27 DOC.34a.1-2	503*
<p style="text-align: center;">Pentannumium</p> <p>As previous  To l. N. to As previous r. E</p>						
144 [F663B]	1.97	13			518-27 DOC.36.1-8	566*
145 [F527]	2.20	30	DNIV[		518-27 DOC.36.1-8	647*
146 [F399]	2.08	12		To l. and r. of verti- cal shaft pellets	518-27 DOC.37.1-2	559*

THE CATALOGUES

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
147 [F554]	1.60	14		To l. and r. of verti- cal shaft pellets	518-27 DOC.37.1-2	647*
148 [F603]	1.65	13		To l. and r. of verti- cal shaft pellets	518-27 DOC.37.1-2	564*
149 [F616]	2.31	13		To l. and r. of verti- cal shaft pellets	518-27 DOC.37.1-2	564*
150 [F675]	1.88	13	]NV~	To l. and r. of verti- cal shaft pellets	518-27 DOC.37.1-2	503*
<p>JUSTINIAN I (527-565) PRE-REFORM Constantinople Follis</p>						
			DNIVSTINI ANVSPPAVG Bust, diad., r.	 Above, cross, to l. star, to r. cross, in ex. CON		
151 [F1401]	14.73	29	ANVSPPAVG	Star to l. ✱, to r.(?), beneath B	527-38 DOC.28a.1-32.3	1215*
152 [F302]	14.36	31	DNIVSTINI ANVSPPA[	Stars to l. and r. ✱	527-38 DOC.28a.1-32.3	708
153 [F507]	15.51	34	DNIVSTINI A[]PAV[	Star to l. ✱, C to r., beneath E	527-38 DOC.32.1-3	847*
<p>Pentannumium</p>						
			As previous As previous	 To r. E		
154 [F1445]	2.26	14	DNIVSTIN[	To l. A	527-38 DOC.35a	1215*
155 [F1415]	2.02	13	A[]SPP[	To l. B	527-38 DOC.35b.1-2	1218*
156 [F1500]	2.23	13	]N[ANVSPP[		527-38 DOC.35a-(35c)	1261*












SARAÇHANE COIN CATALOGUE

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
<p>Nummus</p> <p>As previous As previous</p> <p></p>						
157 [F1843]	0.31	8			527-38 DOC.36.1-2	686*
<p>POST-REFORM Constantinople Follis</p> <p>DNIVSTINI ANVSPPAVG Bust, in cuir. and helmet, facing</p> <p></p> <p>Above, cross, to l.ANNO, to r. date, in ex.CON</p>						
158 [F522]	19.58	37	DNIVSTINI ANVSPPAVG	To r. \times q, beneath B	542/43 DOC.41b.1-2	647*
<p>Decanummiun</p> <p>DNIVSTINI ANVSPPAVG Bust, diad., r.</p> <p></p> <p>Above, cross, to l.ANNO, to r. date, in ex.CON</p>						
159 [F1458]	4.56	20	DNIV[	To r. \times i	547/48 DOC.82.1-2	1218*
160 [F1811]	4.90	17		To r. \times ii	548/49 DOC.83.1-2	1281*
161 [F1288]	4.91	18	DNIVS[	To r. \times iii	549/50 DOC.84.2	1252*
162 [F1319]	3.45	18		To r. \times iiii	550/51 DOC.85.1-4	1255*
163 [F1386]	3.85	18	DNIV[	To r. \times lqi	554/55 DOC.88	1256*
164 [F592]	1.64	15		To r. \times iii	559/60 DOC.92.2	563*
165 [F523]	1.65	13			538-65 DOC.(76)-95	647*
166 [F532]	1.35	14			538-65 DOC.(76)-95	647*




THE CATALOGUES

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
			As previous As previous	Pentannumium € To r. cross		
167 [F116]	2.15	30	]NIV[		543-65 DOC.97e.1-10	13*
168 [F359]	1.66	13	DNIV[		543-65 DOC.97e.1-10	405*
169 [F360]	1.38	14			543-65 DOC.97e.1-10	252
170 [F450]	1.92	14	DN[		543-65 DOC.97e.1-10	341*
171 [F482B]	1.48	13			543-65 DOC.97e.1-10	564*
172 [F536]	2.30	14	]IVSTIN[]PP[		543-65 DOC.97e.1-10	647*
173 [F539]	0.88	12			543-65 DOC.97e.1-10	647*
174 [F670]	1.87	13			543-65 DOC.97e.1-10	569*
175 [F1451]	1.50	13	ANV[		543-65 DOC.97e.1-10	1215*
			Nicomedia Follis DNIVSTINI ANVSPPAVG Bust, in cuir. and helmet, facing	M Above, cross, to l. ANNO, to r. date, in ex. NIKO		
176 [F1429]	18.85	35	DNIVSTINI]NVSPPAVG	To r. X X1 , beneath B	547/48 DOC.127b.1-3	1218*
			Decanumium DNIVSTINI ANVSPPAVG Bust, diad., r.	I Above, cross, to l. ANNO, to r. date, in ex. NIK		

SARAÇHANE COIN CATALOGUE

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
177 [F1138]	4.00	17		To r. 	557/58(?) DOC.--	1223*
178 [F1809]	2.23	15	]NVSPF[	To r. 	560/61 DOC.158	1281*
179 [F586]	3.38	21	DNIVSTIN)	Above, * , to r. 	562/63 DOC.160.1-2	563*
180 [F528]	2.91	15	DNIVST[	To r. 	563/64 DOC.161.1-2	647*
181 [F571]	3.66	16			538-65 DOC.155-63	449*
<p>Carthage</p> <p>As previous As previous</p> <p> Above, cross, to 1.ANNO, to r. date, in ex. CAR</p>						
182 [F1194]	4.20	20		To r. 	540/41 DOC.298.1-5	1221*
<p>JUSTIN II (565-578) Constantinople Follis</p> <p>DNIVSTI NVSPPAVG Justin and Sophia std. facing</p> <p> Above, cross, to 1.ANNO , to r. date, in ex. CON</p>						
183 [F252]	13.68	32	ONIVST[]NVSPPAV4	To r.  , beneath E	569/70 DOC.26d.1-2	823*
184 [F1547]	12.99	28		To r. A (sic)  ,beneath Γ	572/73 DOC.34c	1063*
185 [F31]	13.74	29	DN]NVSPPA[	To r.  ,beneath A	573/74 DOC.36a	Unre- corded
186 [F1100]	12.47	31		To r.  ,beneath B	573/74 DOC.36b.1	1246*







THE CATALOGUES

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
Half-follis						
			As previous As previous	 Above, cross, to l. ANNO, to r. date		
187 [F483]	7.19	22		To r. II, beneath E	568/69 DOC.47d	564*
188 [F687]	6.48	24		Above, ✱, to r. 41, beneath E (?)	571-72 DOC.(51c)	577*
189 [F1764]	5.98	25	]NVSPPA[	To r. X	574/75 DOC.56a-(56c)	1278
Pentanummium						
						
190 [F590]	1.37	16		To r. A	565-78 DOC.60a.1-5	563*
191 [F1812]	2.16	12		To r. A	565-78 DOC.60a.1-5	1460
192 [F1845]	1.41	16		To r. A	565-78 DOC.60a.1-5	686*
193 [F531]	1.81	16		To r. B	565-78 DOC.60b.1-5	647*
194 [F1105]	1.03	16		To r. B	565-78 DOC.60b.1-5	1246*
195 [F1120]	1.70	15		To r. B	565-78 DOC.60b.1-5	1249*
196 [F1127]	1.16	14		To r. B	565-78 DOC.60b.1-5	1246*
197 [F1389]	1.94	15		To r. B	565-78 DOC.60b.1-5	1257*
198 [F1889]	1.54	16		To r. B	565-78 DOC.60b.1-5	688*
199 [F1756]	1.11	16		To r. Γ	565-78 DOC.60c.1-8	1274

SARAÇHANE COIN CATALOGUE

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
200 [F551]	1.39	16		To r. Δ	565-78 DOC.60d.1-6	647*
201 [F990]	1.18	16		To r. Δ	565-78 DOC.60d.1-6	1240*
202 [F409]	1.23	12		To r. +	565-78 DOC.60e.1-5	559*
203 [F430]	2.10	14		To r. +	565-78 DOC.60e.1-5	564*
204 [F1758]	1.84	16		To r. +	565-78 DOC.60e.1-5	1277*
205 [F59]	1.93	15			565-78 DOC.60a.1-e.5	55*
206 [F397]	1.26	15			565-78 DOC.60a.1-e.5	559*
207 [F474]	1.49	16			565-78 DOC.60a.1-e.5	564*
208 [F1129]	2.20	16			565-78 DOC.60a.1-e.5	1249*
209 [F1363]	1.15	14			565-78 DOC.60a.1-e.5	1258*
210 [F1686]	0.81	14			565-78 DOC.60a.1-e.5	1299
<p>Thessalonica Half-follis</p> <p>DNIVSTI NVSPPAV Justin and Sophia std. facing</p> <p>K</p> <p>Above, cross, to l. ANNO, to r. date, in ex. TES</p>						
211 [F690]	5.14	22		To r. I	565/66 DOC.61	577*
212 [F760]	5.99	22	NVSPPAVI	To r. III (?)	567-68 DOC.63.3-4(?)	1065*

THE CATALOGUES

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
			Nicomedia Follis As previous As previous	 Above, cross to 1. ANNO, to r. date, in ex. NIKO		
213 [F407]	11.82	29	]VSPPAVG To r.  , beneath B	577/78 DOC.103b	410*
			 Pentanummium To r. N			
214 [F602]	1.88	15		565-78 DOC.116.1-6	564*	
215 [F1752]	0.94	13		565-78 DOC.116.1-6	1274	
			Cyzicus Pentanummium As previous	 To r. K		
216 [F490]	1.20	15		565-78 DOC.137.1-6	564*	
217 [F664]	1.74	14		565-78 DOC.137.1-6	568*	
			TIBERIUS II (578-582) Constantinople Decanummium ONTIBE RPPAV Bust, in cuir. and cr., facing	 Above, cross, to 1. ✱, in ex. CON		
218 [F530]	2.80	18	ONTIBE RPPAV	To r. B	578 DOC.19a	647*
			ONTIBCON STPPAVI Bust, in cuir. and cr., facing	 Above, cross		






SARAÇHANE COIN CATALOGUE

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
219 [F1765]	2.76	18	<p>]M T I B [] P P A V [</p> <p>Pentannummium</p> <p>∂M T I B P P A V I</p> <p>Bust, diad., r.</p>	Broad cross	579-82 DOC.206.1-10	1278
220 [F446]	1.18	19	<p>∂M [] P P A V I</p>		579-82 DOC.22.1-8	559*
221 [F1186]	1.32	15	<p>∂M C O N [</p> <p>Antioch</p> <p>Three-quarter Follis</p> <p>D N T I B C O N S T A N T P P A V G</p> <p>Bust, in cons. dress and cr. facing</p>	<p>XXX</p> <p>Above, cross, in ex. T H E Y P</p>	579-82 DOC.22.8	1221*
222 [F1489]	7.41	27	<p>] I B C O N] 9 9 A V [</p> <p>MAURICE (582-602) Constantinople Follis</p> <p>D N M A V R C T I B E R P P A V G</p> <p>Bust, in cuir. and helmet, facing</p>	<p>M</p> <p>Above, cross, to 1. ANNO, to r. date, in ex. C O N</p>	579-82 DOC. (45)	1262*
223 [F1440]	10.57	29		To r. Π , beneath A	585/86 DOC.27a.1-2	1218*
224 [F1439]	12.02	32	<p>D N M A V [T I B E R P P A [</p>	To r. Π , beneath E	590/91 DOC.32c	1218*
225 [F1443]	9.75	32	T I B E R P P A C	To r. χ	596/97 DOC.38a-c	1215*
226 [F1364]	11.13	31	T I B E R P P A [	To r. χ , beneath A	596-97 DOC.38a-c	1258*




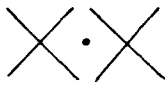
THE CATALOGUES

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
<div> <div>Half-follis</div> <div> <div> DNTIBERM AVRCPPAVI Bust, in cuir. and cr., facing </div> <div> K Above, cross, to l. ANNO, to r. date </div> </div> </div>						
227 [F1241]	5.40	22	AVRP[	To r. II, beneath A	583/84 DOC. (47a)	1252*
<div> <div>DNMAVRC TIBERPPAVG</div> <div> As previous Bust, in cuir. and helmet, facing </div> </div>						
228 [F1434]	6.33	23	DNMAVR TIBPPAV	To r. II (?)	585/86 DOC. 49a-f	1260*
229 [F1655]	3.77	23	]NMAMP[	To r. 4 (?), beneath A	586/87 DOC. 50a.1-(50c)	1181*
230 [F1720]	4.98	20	ON[]VPI C	To r. 4, beneath A	587/88 DOC. 51a.1-2	1272
231 [F1762]	4.66	26		To r. X	591/92 DOC. 55a-(55c)	1278
232 [F408]	3.88	24		To r. 4 ^x (?)	600/01 DOC. (62)	559*
<div> <div>Decanummium</div> <div> <div>DNMAVRC TIBERPPAVG</div> <div> Above, cross, to l. * , in ex. CON </div> </div> </div>						
233 [F246]	1.78	17	]M[	To r. A (?)	582-602 DOC. (65a)-67b	525*
234 [F315]	1.26	18		To r. A	582-602 DOC. (65a)-67b	393
235 [F526]	3.35	20	DNM[]VRIC TIBPPAVG	To r. A	582-602 DOC. 66a	647*
236 [F1937]	3.96	20		To r. B	582-602 DOC. (65a)-67b	1281*
237 [F396]	1.21	15		To r. Γ (?)	582-602 DOC. (65a)-67b	559*

SARAÇHANE COIN CATALOGUE

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
238 [F417]	2.22	21		To r. Γ (?)	582-602 DOC. (65a)-67b	559*
239 [F444]	1.39	19		To r. Δ	582-602 DOC. (65a)-67b	559*
240 [F1961]	1.88	18	]MA TIBPPAV[	To r. *	582-602 DOC.--	411
<p>Pentanummium</p> <p>DNMAV TIBERPPAV Bust, diad., r.</p> 						
241 [F506]	0.59	15	RICPPA	To r. B	582-602 DOC.68b.1-2	564*
242 [F443]	0.77	9	]NM AV[		582-602 DOC.68a.1-e	563*
243 [F1188]	1.27	15	MAVR		582-602 DOC.68a.1-e	1248*
<p>Thessalonica</p> <p>Half-follis</p> <p>DNMAVRC TIBPPAV Bust, in cuir. and cr., facing</p>  <p>Above, cross, to l. ANNO, to r. date, in ex. TES</p>						
244 [F1245]	5.33	22	DNM[	To r. II	583/84 DOC. (73)	1252*
245 [F1149]	3.78	20	TI[	To r. 	589/90 DOC.81a.1-2	1223*
246 [F611]	5.80	22		To r. x	591/92 DOC.82.1-2	563*
247 [F171]	4.43	21	]ICPPAV	To r. 	600/01 DOC.88	704*
<p>Nicomedia</p> <p>Decanummium</p> <p>Bust, in cuir. and cr., facing</p>  <p>Above, cross, to l. and r. *, in ex. NIKO</p>						

THE CATALOGUES

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
248 [F1449]	2.26	14	ονημ[		582-602 DOC.117.1-3	1215*
			Bust, r.	Pentannumium  To r. N		
249 [F445]	1.60	16			582-602 DOC.118.1-2	559*
250 [F594]	1.11	13	μα.		582-602 DOC.118.1-2	572*
251 [F1185]	1.63	15	ON μα		582-602 DOC.118.1-2	1221*
			As previous	Cyzicus Pentannumium  To r. K		
252 [F570]	0.72	13	δνημ[		582-602 DOC.--	449*
253 [F1407]	1.30	14	μα RICPPA		582-602 DOC.--	1218*
			Antioch Follis δνημαγρι CNFACT Bust, in cons. dress and cr., facing	 Above, cross, to l. ANNO, to r. date, in ex. ΤΗΕΥΡ'		
254 [F1474]	9.00	27	δνημα]NPA[	To r. ^x l, beneath Γ	592/93 DOC.163b.1-4	1250*
255 [F1441]	11.01	28		To r. ^x ll, beneath Γ, in ex. ΤΗΕΥΡ'	593/94 DOC.164c.1-5	1218*
			As previous	Half-follis  Above, cross, to l. ANNO, to r. date, in ex. P		




SARAÇHANE COIN CATALOGUE

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
256 [F1209]	6.05	24	ΘΜΤΙΒ ΝΑΤΙΑ	To r. 114 (?)	587/88(?) DOC.179(?)	1247*
<p>PHOCAS (602-610) Constantinople Follis</p> <p>ΘΜΦΟCΑC ΠΕΡΠΑΥC Bust, in cons. dress and cr., facing</p> <p>XXXX</p> <p>Above, ANNO , to r. date</p>						
257 [F1424]	8.25	30		To r. 111 (?), beneath CONB (?)	604/05 (?) DOC.27b.1-3 (?)	1218*
258 [F1743]	6.90	32		To r. 4 , beneath CONE	606/07 DOC. (29d)	1193
259 [F593]	11.54	32	ΘΝΦΟCΑC To 1. *	]ΑΥC To r. 4 , beneath CONE	607/08 DOC.30c.1-2	563*
260 [F411]	11.22	32	ONΦΟCΑC ΠΕΡΠΑΥC		603/04-609/10 DOC. (26a)-(32b)	292*
<p>Three-quarter Follis</p> <p>As previous As previous</p> <p>XXXX</p> <p>Above, cross, to r. date</p>						
261 [F524]	8.73	28	ΘΝ[]ΑΥC	To r. 41 , beneath CONB	608/09 DOC.34	647*
<p>Half-follis</p> <p>As previous As previous</p> <p>XX</p> <p>Above cross or star</p>						
262 [F614]	5.55	24	ΘΝΦΟ[]ΕΡΠΑ[	Above, cross, beneath CONA	603-10 DOC.36a	559*
263 [F1708]	4.79	25	]ΕΡΠΑΥ[	Above, cross, beneath CONB	603-10 DOC.36b	1272
264 [F1647]	5.90	25	ONΦΟ[]Α[	Above, cross	603-10 DOC.36a-c.2	1366
265 [F1371]	5.14	23		Above, star, beneath CONE	603-10 DOC.37e.1-4	1215*





THE CATALOGUES

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
266 [F1269]	4.57	24	ONFOC[	Above, star	603-10 DOC. 37a.1-e.4	1252*
267 [F1394]	3.91	24		Beneath CONB	603-10 DOC. 36a-37e.4	1256*
268 [F1252]	3.65	26	DNFOCΛ[PE[	Beneath CONΔ	603-10 DOC. 36a-37e.4	1362*
269 [F28]	3.88	22			603-10 DOC. 36a-37e.4	206
270 [F980]	5.26	22	]FOCAS PERPAVG		603-10 DOC. 36a-37e.4	1329*
271 [F1268]	4.60	25			603-10 DOC. 36a-37e.4	1213*
272 [F1351]	3.67	28/26 2 pc			603-10 DOC. 36a-37e.4	1368
<div> <div>Decanummium</div> <div>As previous. Bust, in cuir. and cr., facing</div> <div> <div>×</div> <div>Above, cross</div> </div> </div>						
273 [F420]	2.10	17	Shield PERPA[		602/03(?) DOC. 38.1-3	563*
274 [F1411]	2.21	18	Shield PERPAV[		602/03(?) DOC. 38.1-3	1260*
275 [F1536]	1.93	19	∂N[]oc[Shield		602/03(?) DOC. 38.1-3	1285*
276 [F646]	2.73	18	∂FO[Paludamentum		603(?) -10 DOC. 39.1-9	577*
277 [F1404]	2.41	21	∂F[PE[Paludamentum		603(?) -10 DOC. 39.1-9	1215*
278 [F525]	3.27	22	]NFO C[		602-10 DOC. 38.1-39.9	647*
<div> <div>Pentanummium</div> <div>∂NFOC APPA Bust, diad., r.</div> <div> <div>4</div> </div> </div>						


SARAÇHANE COIN CATALOGUE

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
279 [F451]	1.70	18	CAPE		602-10 DOC.40.1-7	563*
280 [F454]	1.43	17	CAP[		602-10 DOC.40.1-7	563*
281 [F582]	1.88	18	RPAV		602-10 DOC.40.1-7	563*
282 [F583]	2.27	18			602-10 DOC.40.1-7	563*
283 [F819]	1.40	13	ΘNFOC APPA[		602-10 DOC.40.1-7	559*
284 [F1121]	1.22	16	]NFO		602-10 DOC.40.1-7	1249*
			Thessalonica(?) (OMFOCA EPPAV) Bust, in cuir. and cr., facing			
				 Above, cross, to l. ANNO, to r. date, in ex. TES		
285 [F580]	4.31	25	Inscr. obsc., bust bearded	Date and TES obsc.	602/03-603/04 DOC.49-(50)	563*
			OMFOCA ERPAVC Phocas and Leontia stg. facing			
				 Above, cross, in ex. TES		
286 [F1205]	5.36	23	OMFOC[		603-05 DOC.51.1-7	1221*
			Nicomedia Follis ΘMFOCA PERAVG Bust, in cons. dress and cr., facing			
				 Above, ANNO, to r. date		
287 [F1013]	7.00	30	]nFO[	To r. 4, in ex. NIK[	606/07 DOC.58a.1-b.2	1222*
288 [F1452]	8.62	30		To r. 41, in ex. NIKOA	607/08 DOC.--	1215*











THE CATALOGUES

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
289 [F1428]	7.23	29		To r. 4, in ex. NIKOA	607/08 DOC.--	1218*
290 [F658]	10.92	32	∂mFOCA	To r. 4, in ex. NIKOB	607/08 DOC.--	1280*
			As previous As previous		Above, cross, to r. date	
291 [F1455]	4.77	26		To r. II (?)	608/09(?) DOC.(68)(?)	1218*
			As previous	Cyzicus Follis 	Above, ANNO, to r. date	
292 [F1603]	7.58	30	∂N[]OCA	In ex.]Y[	603/04-610 DOC.70.1-76c.	1158*
			As previous	Half-follis 	Above, cross, to r. date	
293 [F954]	3.98	24	]OCA PERPAYG	To r. II, in ex. KYZB	603/04 DOC.79b.1-4	1327*
294 [F666]	4.45	21		Above, *, no date, in ex. KYZA	606(?) -10 DOC.82a.1-4	577*
295 [F693]	4.98	26		Above, cross, no date, in ex. KYZB	606(?) -10 DOC.(81b)	564*
			Antioch Follis ONFOCA NEPEAV Phocas and Leontia stg. facing		Above, cross, to 1. ANNO, to r. date, in ex. THERP'	
296 [F501]	9.40	32	ONFOC[NEPEA*	To r. 41	607/08 DOC.88.1-3	564*
297 [F1045]	8.27	27	ONFOCA] PEA[	To r. 41	607/08 DOC.88.1-3	1242*

SARAÇHANE COIN CATALOGUE

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
HERACLIUS (610-641) Constantinople Follis (Class 1)						
			ΘNHRACLI M CPERPAVI Bust, in cuir. and cr. or helmet, facing	 Above, cross, to 1. ANNO, to r. date, in ex. CON		
298 [F1217]	10.74	30	]ERACLI]PERPAV	To r. I, beneath B	610/11 DOC.69b.1-2	1221*
299 [F1346]	10.03	30	DNHE[	To r. II	611/12 DOC.70a-d.2	1362*
300 [F1598]	8.13	29	]hRA[	To r. II, beneath B	611/12 DOC.70a-d.2	1162*
(Class 2) ddNNHERACLI M CETHERA CONS TPAV Heraclius and Hera. Const. stg. facing in chlamys and cr.						
301 [F457]	10.58	31	RACONSTPPA	To r. II, beneath E	613 DOC.76e.1-4	563*
302 [F452]	13.55	29	ddNNHERACLI	To r. II, beneath Γ Overstruck on Phocas, Cpl, B, yr. 3	613/14 DOC.79c.1-3	563*
303 [F597]	8.52	28	]CONST[	To r. II Overstruck on Phocas and Leontia	613/14 DOC.79a.1-e	564*
304 [F715]	8.19	34		To r. II, beneath Γ Overstruck on Phocas	613/14 DOC.79c.1-3	1118*
305 [F1457]	11.79	33	RACONSTP.	To r. II, beneath Γ Overstruck on Justinian, Γ, yr. 28	613/14 DOC.79c.1-3	1218*
306 [F1704]	8.86	28	ddNNHER[	To r. IV, beneath Δ Overstruck on Tiberius II	614/15 DOC.(80d)	1275




THE CATALOGUES

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
307 [F1350]	9.60	33		To r.  , beneath A	615/16 DOC.81a	1367*
308 [F142]	10.59	29		To r.  , beneath A Overstruck on Phocas, Cpl., B , yr. 4	615/16 DOC.81c	701*
309 [F1654]	9.27	33		Overstruck on Phocas, Nicomedia, B , yr. 6	613-15/16 DOC.76a.1-83	1323*
(Class 4)						
			Heraclius (center), Hera. Const. (right), and Martina (left), stg. facing, in chlamys and cr.	 Above, cross and ANNO , to l.  , to r. date, in ex. CON		
310 [F1459]	6.98	25		Beneath Γ	624/25-628/29 DOC.99a.1-(103b)	1218*
(Class 5)						
			Heraclius and Hera. Const. stg. facing; H. wears mil. dress, H.C. wears chlamys	 Above, cross and C , to l. ANNO , to r. date, in ex. CON		
311 [F585]	5.11	22		To r.   , beneath A	635/36 DOC.113a	563*
312 [F1103]	6.19	25 broken		Beneath Γ	631/32-639/40 DOC.107a.1-116c.4	1223*
313 [F166]	5.08	24		Above  , beneath E	631/32-639/40 DOC.107a.1-116c.4	702*
Three-quarter Follis						
			As previous	 To l. ANNO , to r. date, in ex. CON		
314 [F1190]	3.65	26		Date obsc., beneath Γ	629/30(?) DOC.117c.1-4(?)	1248*
Half-follis (Class 1)						
			As Follis Class 1	 Above cross, to l. ANNO , to r. date		



SARAÇHANE COIN CATALOGUE

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref	Prove- nance
315 [F183]	4.37	23	∂NhrAC[]AV	To r. II, beneath Γ	611/12 DOC.--	704*
316 [1690]	5.58	25	]hεRA[	To r. II, beneath Δ	611/12 DOC.--	1385*
317 [F1347]	4.76	25	PERPAYG	To r. II	611/12 DOC.--	1362*
318 [F1447]	4.18	24		To r. II, beneath A Overstruck on Phocas(?)	612/13 DOC.73a-b	1215*
(Class 2)						
			As Follis Class 2	As previous		
319 [F1343]	2.65	22		To r. 4, beneath Γ	615/16 DOC.84.1-2	1253*
(Class 5)						
			As Follis Class 5	As previous		
320 [F1097]	5.49	23	Betw. *	To r. XX, beneath Δ (?)	629/30 DOC.118d.1-2	1223*
321 [F1220]	1.43	17		To r. ^x 4 (?)	634/35 DOC.--	1221*
322 [F1189]	1.85	22		To r. ^x _x , beneath B (?)	639/40 DOC.123a	1248*
323 [F612]	1.63	19		To r. ^x _x , beneath Γ	639/40 DOC.123.a-b	559*
324 [F1339]	2.75	23		To r. ^x _x	639/40 DOC.123.b	1215*
Decanumium						
			As Follis Class 1	I Above, cross, to l. *, in ex. con		
325 [F460]	1.77	19	∂Nh[		610-41 DOC.75a-b	563*


THE CATALOGUES

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
<p>Thessalonica Half-follis</p> <p>dNHēRAC LIYSPPAVG Heraclius and Hera. Const. stg. facing, in chlamys and cr.</p> <p></p> <p>To l. ANNO, to r. date, in ex. ΘΕC</p>						
326 [F1003]	5.61	22		To r. 411	616/17 DOC.142	1323*
<p>Nicomedia Follis (Class 1)</p> <p>δNHRACLI YSPERPAVI Bust, in cuir. and helmet, facing</p> <p></p> <p>Above, cross, to l. ANNO, to r. date, in ex. NIKO</p>						
327 [F1653]	10.61	29	δNHēRACI[	To r. I, beneath A	610/11 DOC.153a.1-2	1371*
328 [F1732]	10.57	28		To r. I, beneath A	610/11 DOC.153a.1-2	1272
329 [F1402]	10.32	33		To r. III, beneath A	612/13 DOC.157	1215*
<p>(Class 2)</p> <p>ddNNHēRACLI YSETHēRACAs previous OhSTPAV Heraclius and Hera. Const. stg. facing, in chlamys and cr.</p>						
330 [F459]	11.86	32		To r. II, beneath A Overstruck on Phocas and Leontia	612/13 DOC.158a.1-2	563*
331 [F1714]	9.42	31	RACONSTANPP[	To r. II, beneath A Overstruck Phocas(?), Cyzicus, B	612/13 DOC.158a.1-2	1272
<p>Cyzicus Follis (Class 1)</p> <p>δNHRACLI YSPERPAVI Bust, in cuir. and helmet, facing</p> <p></p> <p>Above, cross, to l. ANNO, to r. date, in ex. KYZ</p>						

SARAÇHANE COIN CATALOGUE

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
332 [F1892]	10.22	32	PERPRAYG	To r. III, beneath B Overstruck on Phocas(?)	612/13 DOC.169a.1-11	Unre- corded
333 [F1551]	7.63	31	]ERACII PE[]A[	To r. II, beneath B	613/14 DOC.170b	Unre- corded
<p>CONSTANS II (641-668) Constantinople Follis (Class 1)</p> <p>ENTOTO NIKA Constans stg. facing in chlamys and cr.; holds in r. hand long cross</p>  <p>To l. ANA, to r. NEOÇ</p>						
334 [F1195]	4.46	25		In ex. Δ1	641/42 DOC.59d.1-2	1221*
<p>(Class 2)</p> <p>As Class 1</p>  <p>Above, ANA, to l. OΦA, to r. NEOÇ</p>						
335 [F667]	4.45	22		In ex. AII	642/43 DOC.61a.1-5	Unre- corded
<p>(Class 4)</p> <p>As Class 1</p> <p>As Class 1, but above, cross</p>						
336 [F1196]	3.41	22		In ex. 4 (?)	645/46 DOC.64a.1-e.2	1221*
337 [F1095]	3.51	22		In ex. 4Γ (?)	646-47 DOC.65d	1223*
338 [F1143]	2.69	22			644/45-651/52 DOC.63a-68.2	1223*
339 [F1293]	3.07	21		Above, K	644/45-651/52 DOC.63a-68.2	1252*
340 [F1425]	2.10	20		Above, *	644/45-651/52 DOC.63a-68.2	1259*


THE CATALOGUES

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
			As Class 1	(Class 5)		
					Above, cross or star, to l. ANA, to r. NEOC	
341 [F574]	3.80	22		Above, cross, beneath Γ, in ex. I A	651/52 DOC.69c	559*
342 [F1161]	1.61	22		Above, cross, beneath Δ, in ex. I A	651/52 DOC.69d.1-3	1224*
343 [F1272]	2.30	19		Above, cross, beneath Ε, in ex. X I (?)	651/52 DOC.69e.1-2	1213*
344 [F1076]	2.35	20		Above, star, beneath Β, in ex. X II (?)	652/53 DOC.70a-(70b)	1239*
345 [F1377]	1.85	21		In ex. X II	652/53 DOC.70a-(70b)	1257*
346 [F1378]	3.16	20		Above, star, beneath Δ, in ex. X III	653/54 DOC.71c	1257*
347 [F164A]	3.19	24		Above, star, beneath Ε, in ex. X III (?)	653/54 DOC.(71d)	702*
348 [F1221]	4.06	18		Above, star, beneath Ε, in ex. X III	653/54 DOC.(71d)	1221*
349 [F180]	2.09	20		In ex. X III	653/54 DOC.(71a)-71b	704*
350 [F1192]	2.56	23		Beneath Α, in ex. X IIII	654/55 DOC.72a-c	1248*
351 [F615]	1.63	19		Above, star, beneath Ε, in ex. X Y	655/56 DOC.(73d)	559*
352 [F165]	1.15	17		Above, cross, beneath Α, in ex. X Q (?)	656/57 DOC.--	702*
353 [F1337]	1.47	21		Above, cross	651/52(?) DOC.69a-e.2(?)	1255*
354 [F1191]	2.88	22		Above, star	652/53- 656/57(?) DOC.70a-74	1248*

SARAÇHANE COIN CATALOGUE

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
355 [F1345]	2.34	20		Above, star, beneath €	652/53- 656/57(?) DOC.70a-74	1215*
356 [F1436]	2.41	21		Above, star	652/53- 656/57(?) DOC.70a-74	1250*
357 [F1813]	1.87	21		Above, star, beneath Γ	652/53- 656/57(?) DOC.70a-74	1218*
358 [F164E]	3.21	20		Beneath A (?)	651/52- 656/57(?) DOC.69a-74	702*
359 [F398]	2.02	21		Beneath €	651/52- 656/57(?) DOC.69a-74	559*
360 [F1167]	3.69	25			651/52- 656/57(?) DOC.69a-74	1223*
			As Class 1	(Class 6) M	Above, star, to l. KΩN, to r. CTAN	
361 [F164B]	3.69	22		Beneath A , in ex. X4	655/56 DOC.(75a)	702*
362 [F164C]	2.00	20		Beneath A , in ex. X4(?)	655/56 DOC.(75a)	702*
363 [F164D]	3.44	21		Beneath A , in ex. X4	655/56 DOC.(75a)	702*
364 [F1454]	3.26	20		Beneath Δ , in ex. X4	655/56 DOC.(75d)	1218*
365 [F1145]	2.92	20		In ex. X4	655/56 DOC.(75a)-(75e)	1223*
366 [F1137]	2.51	23	ENTOT[	Beneath A	655/56-656/57 DOC.(75a)-76e	1223*




THE CATALOGUES

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
367 [F652]	2.83	23		Beneath Γ	655/56-656/57 DOC.(75a)-76e	577*
368 [F1362]	2.74	20	]NTOT.	Beneath Δ	655/56-656/57 DOC.(75a)-76e	1215*
369 [F1369]	2.29	22			655/56-656/57 DOC.(75a)-76e	1257*
370 [F1423]	2.73	25			655/56-656/57 DOC.(75a)-76e	1218*
(Class 7)						
As Class 1			 Above, K , to 1. ANNO, to r. date, in ex. CON			
371 [F1731]	2.77	30		To r. $\frac{x}{y}$, beneath ϵ	656/57 DOC.--	1272
372 [F1376]	1.89	23		To r. $\frac{x}{y}$, beneath B	656/57 DOC.--	1257*
373 [F1144]	1.76	19		To r. $\frac{x}{y}$, beneath Δ	657/58 DOC.78a.1-b.2	1223*
374 [F1158]	2.76	23			656/57-657/58 DOC.77a-78b.2	1223*
375 [F1334]	2.37	19			656/57-657/58 DOC.77a-78b.2	1214*
376 [F1770]	1.94	21		Beneath A	656/57-657/58 DOC.77a-78b.2	1278
(Class 8)						
Constans II and Constantine IV stg. facing; C.II wears mil. dress, C.IV wears chlamys			As previous			
377 [F1576]	3.19	23		To r. $\frac{x}{y}$, beneath Δ	655/56 DOC.(79c)	1238*
378 [F167]	2.66	23			655/56-657/58 DOC.79a-81d	702*





SARAÇHANE COIN CATALOGUE

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
379 [F1007]	3.22	19			655/56-657/58 DOC.79a-81d	1240*
380 [F1096]	2.69	26			655/56-657/58 DOC.79a-81d	1223*
(Class 9)						
			Constans stg. facing in mil. dress; to l. date, to r. M	Heraclius, Constantine IV, and Tiberius, stg. facing, in chlamys and cr.		
381 [F292]	2.24	21	Beneath Δ ?		659/60-663/64 DOC.82a-86d	606*
382 [F1173]	2.00	18	Beneath Δ		659/60-663/64 DOC.82a-86d	1223*
(Class 11)						
			Bust of Constans II, in helmet and plume, facing	M Above, bust of Constantine IV, to l. and r. busts of Heraclius and Tiberius, all in chlamys		
383 [F181]	5.25	23	Helmet w. cross		666-68 DOC.(88a)-88 f	704
384 [F836]	2.71	22	Helmet w. cross	To r. €	666-68 DOC.88d	1292
385 [F1073]	3.94	22	Helmet w'out cross		666-68 DOC.89a-e.2	1244*
386 [F1759]	4.52	26	Helmet w'out cross		666-68 DOC.89a-e.2	1193
387 [F1801]	2.99	22	Helmet w'out cross		666-68 DOC.89a-e.2	Unre- corded
388 [F179]	3.67	27	Helmet w'out cross, to r. *		666-68 DOC.--	704
389 [F509]	3.22	20			666-68 DOC.(88a)-89e.2	1055
390 [F685]	3.95	21			666-68 DOC.(88a)-89e.2	1280*

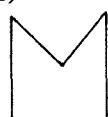



THE CATALOGUES

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
391 [F1383]	2.30	24 Corroded			606-68 DOC.(88a)-89e.2	1256*
(Uncertain Class)						
392 [F461]	2.48	22			641-68	1015*
393 [F1162]	0.80	20			641-68	1246*
394 [F1218]	2.67	22			641-68	1221*
395 [F1361]	3.27	24			641-68	1258*
396 [F1456]	2.32	21			641-68	1218*
Half-follis (Classes 2/3)						
			Bust, beardless or w. short beard, facing		Above, cross, to l. ANA, to to r. NĒ	
397 [F294]	2.41	19			641-c.47 DOC.91a-92	606*
(Class 4)						
			Constans II, stg. facing		Above, cross, to l. ANA, to r. NĒ ^o _ç	
398 [F418]	2.16	19		ε ^N _o ç , beneath A	655/56(?) DOC.93a.1-c	559*
(Class 5)						
			Constans II and Constantine IV stg. facing; C.II wears mil. dress, C.IV wears chlamys		Above, cross, to l. ANNO, to r. date	
399 [F205]	1.79	18			656/57(?) DOC.94a-b	512*


SARAÇHANE COIN CATALOGUE

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
(Class 6)						
			Bust of Constans II facing, in cr. w. cross and w. long beard		Above, cross, to l. ANA, to r. NE	
400 [F1391]	1.96	17		Beneath A	660-68 DOC.95a.1-2	1257*
401 [F1108]	2.50	22		Beneath B	660-68 DOC.95a.1-e	1246*
402 [F647]	2.00	20		Beneath Γ	660-68 DOC.95b1-3	571*
403 [F433]	2.46	24			660-68 DOC.95a.1-e	564*
404 [F1183]	0.99	16			660-68 DOC.95a.1-e	1248*
405 [F1199]	1.47	15			660-68 DOC.95a.1-e	1248*
406 [F1658]	0.93	17			660-68 DOC.95a.1-e	1323*
407 [F1802]	2.09	22			660-68 DOC.95a.1-e	1193
(Uncertain Class)						
			Constans II stg. facing w. long cross		To l. ANNO , to r. X (?), in ex.] 0[
408 [F230]	2.36	23				520*
Decanummium						
			Bust of Constans II facing, in cr. w. cross and w. long beard		Above, cross, in ex. CON	
409 [F1506]				To l.  , to r. Γ	661/62 DOC.97	1250*
410 [F852]	1.22	17		To r. A	660-68 DOC.96-(100b)	938*


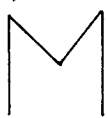
THE CATALOGUES

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
<p>CONSTANTINE IV (668-685) Constantinople Follis (Class 1)</p>						
			<p>ΘNCONSTAN TINI SPAY Bust, facing, in cuir. and helmet, holding gl. cr.</p>	<p> Above, cross, to l. and r. Heraclius and Tiberius in chlamys and cr. In ex. CON</p>		
411 [F1402]	14.80	37	ΘNCONS[	Beneath A	668-73 DOC.28a	1257*
412 [F1375]	16.49	39	ΘNCON[]PAY	Beneath E	668-73 DOC.28e.1-4	1257*
<p>(Class 5)</p>						
			<p>ΘNCONSTAN TINI SPAY Bust, 3/4 facing, in cuir. and helmet, holding spear behind head</p>	<p> Above, cross, to l. ANNO, to r. date, in ex. CON</p>		
413 [F1021]	13.09	40		<p>To l.  , beneath Γ</p>	683/84 DOC.(32a)-32b.2	1240*
<p>Decanummium (Class 1)</p>						
			<p>Bust, facing, with gl. cr.</p>	<p> Above, cross, to l. cross, to r. K , in ex. CON</p>		
414 [F1379]	3.66	24			668-73 DOC.38.1-9	1257*
415 [F1662]	4.76	30		Overstruck on Constans II, Follis, Cl. 10 or 11	668-73 DOC.38.1-9	1181*
<p>(Class 2)</p>						
			<p>Bust 3/4 facing, with spear</p>	<p>As previous, but no cross above</p>		
416 [F1044]	3.45	22			674-85 DOC.39.1-14	1242*








SARAÇHANE COIN CATALOGUE

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
417 [F1119]	1.96	22			674-85 DOC.39.1-14	1249*
418 [F1223]	6.22	22		Overstruck on Constans II, Follis, Cl. 11	674-85 DOC.39.1-14	1247*
419 [F1349]	3.31	23			674-85 DOC.39.1-14	1367*
420 [F1398]	4.50	22		Overstruck	674-85 DOC.39.1-14	1257*
421 [F1420]	3.72	23		No exergue	674-85 DOC.39.1-14	1218*
422 [F1491]	2.83	24		Overstruck	674-85 DOC.39.1-14	1262*
423 [F1499]	4.69	23			675-85 DOC.39.1-14	1261*
424 [F232]	4.24	24			674-85 DOC.39.1-14	990
425 [F1093]	3.27	19		Overstruck on Constans II, Follis, Cl. 11	674-85 DOC.39.1-14	1223*
JUSTINIAN II (First Reign, 685-695) Constantinople Half-follis (Class 1/2) Bust, facing, in chlamys and cr.						
					Above, cross, to l. ANNO, to r. date	
426 [F645]	3.33	29		To r. II , beneath Γ	686/87 DOC.20a.1-2	577*
427 [F1390]	4.50	26		To r. II , beneath Δ (?)	686/87 DOC.20b	1257*
428 [F173]	5.24	24		To r. II	686-87 DOC.20a.1-d.2	704*
429 [F865]	3.76	23		To r. II	686-87 DOC.20a.1-d.2	922*




THE CATALOGUES

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
430 [F1117]	3.16	24		To r. II Overstruck on Constan- tine IV(?) (Decanummium?)	686/87 DOC.20a.1-d.2	1245*
431 [F1234]	2.56	23		To r. II Overstruck on Constans II, Follis	686-87 DOC.20a.1-d.2	1253*
<p>LEONTIUS (695-698) Constantinople Half-follis</p> <p>Bust, facing, in loros and cr.</p> <p></p> <p>Above, cross, to l. ANNO, to r. date</p>						
432 [F255]	4.14	27		To r. A, beneath B (?)	695/96 DOC.8a	588
<p>TIBERIUS III (698-705) Constantinople Follis (Class 1)</p> <p>DTIBERI VSPEAV Bust, facing, in cuir. and cr., holding spear be- fore body</p> <p></p> <p>Above, cross, to l. ANNO, to r. date, in ex. CON</p>						
433 [F1352]	4.95	28		Overstruck on Leontius, Half-follis	698/99-700/01 DOC.7-(10)	1215*
<p>(Class 2)</p> <p>As previous Tiberius stg. facing, in mil. dress and cr.</p> <p>As previous</p>						
434 [F1273]	3.68	21		To r. Δ, beneath A	701/02 DOC.11a.1-2	1213*
435 [F1331]	1.94	22		To r. Δ	701/02 DOC.11a.1-e.6	1214*
436 [F1146]	1.63	24		Beneath B	701/02(?) DOC.11a.1-e.6	1223*

SARAÇHANE COIN CATALOGUE

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
437 [F172]	4.86	25		Beneath  Overstruck on Tiberius III, Follis (Class 1?)	701/02(?) DOC.11a.1-e.6	704*
			Half-follis (Class 2) As previous As previous		Above, cross, to 1. ANNO, to r. date	
438 [F1187]	1.38	19			701-05 DOC.13	1248*
			JUSTINIAN II (Second Reign, 705-711) Constantinople Half-follis (Class 1)		Above, cross, to 1. ANNO, to r. A^{\times}	
439 [F184]	3.61	29	Bust facing, in loros and cr.	Beneath 	705 DOC.13b.1-3	704*
440 [F1380]	3.26	23		Beneath 	705 DOC.13b.1-3	1256*
			PHILIPPICUS (711-713) Constantinople Half-follis		Above, cross, to 1. ANNO, to r. date	
441 [F721]	2.31	18	Bust facing, in loros and crown, holding scipio		711-13 DOC.12	503*
			ANASTASIUS II (Artemius) (713-715) Constantinople Follis		Above, cross, to 1. ANNO, to r. date, in ex. CON	
			$\text{ANARTEMIVSA NASTASIVSMVL}$ Bust, facing, in chlamys and cr., holding anexikakia			

THE CATALOGUES

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
442 [F1730]	3.09	20		To r. l (?), beneath A	713-14 DOC.7a.1-3	1272
443 [F1438]	2.56	24	]14A[	To r. l , beneath Γ Overstruck	713-14 DOC.7b	1218*
			Half-follis As previous As previous	 Above, cross, to l. ANNO, to r. date		
444 [F233]	2.71	16		To r. ••	713/14 DOC.9	990
445 [F1166]	1.21	21		To r. ll , beneath Γ (?)	714/15 DOC.--	1223*
			THEODOSIUS III (715-717) Constantinople Follis Bust, facing, in loros and cr., holding gl. surmount- ed by patriarchal cr.	 Above, cross, to l. ANNO, to r. date, in ex. CON		
446 [F1525]	5.12	24		Beneath Γ	715/16(?) DOC.5(?)	1282*
			LEO III (717-741) Constantinople Follis (Class 2) ΘNDLEO NPAMYΛ Bust, facing, in chlamys and cr.	 Above, bust of Constantine V, facing, in chlamys and cr., to l. ANN , to r. xx		
447 [F128]	5.37	22	ΘNDLE[	Beneath A (?)	c.721-c.25 DOC.30a.	864*
448 [F309]	2.29	19	]LEO NP[	Beneath A	c.725-32 DOC.31a.1-b.5	395*
449 [F511]	3.91	20	ΘNLE[NPAMYΛ[	CON[beneath A	c.725-32 DOC.31a.1-b.5	634*

SARAÇHANE COIN CATALOGUE

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
450 [F977]	4.56	20	ΘNNLEO[		c.725-32 DOC.31a.1-b.5	1220*
451 [F1123]	4.63	20			c.725-32 DOC.31a.1-b.5	1221*
452 [F1140]	2.82	18	ΘNDLEO[	CON STAN Beneath A	c.725-32 DOC.31a.1-b.5	1246*
453 [F1159]	2.87	19	]LEO NPA[	Beneath A	c.725-32 DOC.31a.1-b.5	1249*
454 [F1385]	3.33	23		Beneath A	C.725-32 DOC.31a.1-b.5	1256*
455 [F1962]	2.04	18			c.725-32 DOC.31a.1-b.5	411

(Class 4)

LEON S CON
Busts of Leo III and
Constantine V, facing,
in chlamys and cr.,
each holding
anexikakia



Above, cross,
to l. XXX, to
r. NNN

456 [F1703]	3.64	27	ONS	Beneath B	c.735-41 DOC.39b.1-8	1323*
457 [F1955]	2.20	25		Beneath B	c.735-41 DOC.39b.1-8	413

Half-follis

(Class 2)

As Follis Class 2





Above, bust of
Constantine V,
facing, in chlamys
and cr., to l. ANN, to
r. XX

458 [F1338]	1.93	16		co[, to l. XX	c.725-32 DOC.34	1215*
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CONSTANTINE V
(741-775)
Constantinople
Follis
(Class 1)


THE CATALOGUES

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
			ΘNCON STANZIN Bust, facing, in chlamys and cr.	 Above, cross, to l. XXX, to r. NNN		
459 [F208]	2.42	16	DNOC]TANT		741-(?) DOC.6a.1-b.3	519
460 [F296]	2.25	19	]ON]NTIN	Beneath A	741-(?) DOC.6a.1-3	391*
461 [F321]	2.82	19	STANZIN	Beneath A	741-(?) DOC.6a.1-3	399*
462 [F1733]	1.47	17		Beneath A	741-(?) DOC.6a.1-3	1272
(Class 3)						
			Busts of Constan- tine V and Leo IV, facing, in chlamys and cr. Between, cross	 Above, bust of Leo III, facing, in loros and cr., to l. XXX, to r. NNN, beneath A		
463 [F45]	1.78	17			751-69(?) DOC.11.1-13	290
464 [F384]	1.64	23			751-69(?) DOC.11.1-13	315*
465 [F962]	1.45	19			751-69(?) DOC.11.1-13	1335*
466 [F1054]	1.21	18			751-69(?) DOC.11.1-13	1222*
467 [F1141]	1.71	19			751-69(?) DOC.11.1-13	1246*
468 [F1142]	1.81	19			751-69(?) DOC.11.1-13	1223*
469 [F1164]	1.96	20			751-69(?) DOC.11.1-13	1243*
470 [F1405]	1.48	18			751-69(?) DOC.11.1-13	1257*

SARAÇHANE COIN CATALOGUE

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
471 [F1427]	1.55	18			751-69(?) DOC.11.1-13	1218*
472 [F1423]	1.17	17			751-69(?) DOC.11.1-13	1260*
473 [F1492]	1.25	17			751-69(?) DOC.11.1-13	1262*
474 [F1570]	1.40	17			751-69(?) DOC.11.1-13	1287*
475 [F1724]	1.80	18			751-69(?) DOC.11.1-13	1272
476 [F1774]	1.63	18			751-69(?) DOC.11.1-13	1278
(Class 4)						
			As previous			
			Constantine V and Leo IV std., facing, in chlamys and cr.			
477 [F1112]	3.41	20			769(?)–75 DOC. 13.1–3	1246*
478 [F1432]	2.72	19			769(?)–75 DOC.13.1–3	1260*
Half-follis						
			As Follis Class 3			
			<div style="display: flex; align-items: center; justify-content: center;"><div style="font-size: 2em; margin-right: 10px;">K</div><div>Above, cross, to l. XXX, to r. NNN, beneath A</div></div>			
479 [F1075]	1.10	17	?] NOC [?		751-69(?) DOC.12	1243*
LEO IV (775–780) Constantinople Follis (Class 1)						

THE CATALOGUES

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
			Busts of Leo IV and Constantine VI, facing, in chlamys and cr. Between cross	 Above, busts of Leo III and Con- stantine V, facing, in loros and cr., flanked by B (l.) and A (r.) To l. X , to r. N , beneath A		
480 [F159]	4.48	22			776-78 DOC.4.1-11	703
481 [F203]	4.22	24			776-78 DOC.4.1-11	Unre- corded
482 [F209]	4.54	23			776-78 DOC.4.1-11	551
483 [F1006]	2.62	18			776-78 DOC.4.1-11	1240*
484 [F1026]	4.78	22			776-78 DOC.4.1-11	1222*
485 [F1028]	2.97	24			776-78 DOC.4.1-11	1219*
486 [F1030]	2.90	22			776-78 DOC.4.1-11	1240*
487 [F1040]	3.57	22			776-78 DOC.4.1-11	1242*
488 [F1053]	4.48	22			776-78 DOC.4.1-11	1242*
489 [F1106]	4.30	25			776-78 DOC.4.1-11	1223*
490 [F1107]	4.24	22			776-78 DOC.4.1-11	1246*
491 [F1122]	2.25	25			776-78 DOC.4.1-11	1249*
492 [F1124]	4.16	27			776-78 DOC.4.1-11	1221*


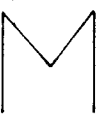
SARAÇHANE COIN CATALOGUE

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
493 [F1132]	5.48	25			776-78 DOC.4.1-11	1246*
494 [F1133]	4.92	24			776-78 DOC.4.1-11	1246*
495 [F1134]	4.48	23			776-78 DOC.4.1-11	1246*
496 [F1135]	4.61	25		Β Α	776-78 DOC.4.6-8	1246*
497 [F1136]	4.99	24			776-78 DOC.4.1-11	1246*
498 [F1157]	4.92	23			776-78 DOC.4.1-11	1246*
499 [F1160]	4.75	26			776-78 DOC.4.1-11	1249*
500 [F1163]	4.54	24			776-78 DOC.4.1-11	1246*
501 [F1184]	4.34	25			776-78 DOC.4.1-11	1222*
502 [F1227D]	5.76	27			776-78 DOC.4.1-11	1247*
503 [F1243]	4.77	24			776-78 DOC.4.1-11	1252*
504 [F1387]	3.95	22			776-78 DOC.4.1-11	1257*
505 [F1393]	3.36	24		Β Α	776-78 DOC.4.6-8	1215*
506 [F1419]	5.11	25			776-78 DOC.4.1-11	1259*
507 [F1511]	2.81	22 Corroded			776-78 DOC.4.1-11	1235*
508 [F1512]	2.95	24			776-78 DOC.4.1-11	1234*



THE CATALOGUES

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
509 [F1600]	4.22	22			776-78 DOC.4.1-11	1288
510 [F1602]	4.30	23			776-78 DOC.4.1-11	1289
511 [F1712]	5.66	24			776-78 DOC.4.1-11	1274
(Class 2)						
			Leo IV and Constan- As previous, but lacks tine VI std. facing, B|A ; instead :|: in chlamys and cr.			
512 [F379]	2.76	21			778-80 DOC.6.1-10	1227*
513 [F1038]	4.29	21			778-80 DOC.6.1-10	1240*
514 [F1049]	3.83	24		:|:	778-80 DOC.6.1-10	1242*
515 [F1061]	2.90	19			778-80 DOC.6.1-10	1242*
516 [F1155]	4.65	27			778-80 DOC.6.1-10	1246*
517 [F1207]	3.89	25			778-80 DOC.6.1-10	1222*
518 [F1208]	3.97	25			778-80 DOC.6.1-10	1221*
519 [F1266]	4.61	24			778-80 DOC.6.1-10	1362*
520 [F1382]	2.59	23			778-80 DOC.6.1-10	1256*
521 [F1437]	4.99	24			778-80 DOC.6.1-10	1259*
522 [F1480]	4.24	25		∴|*(?)	778-80 DOC.6.1-10	1262*

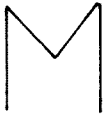
SARAÇHANE COIN CATALOGUE

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
523 [F1652]	4.58	26			778-80 DOC.6.1-10	1358*
CONSTANTINE VI (780-797) Constantinople Follis (Class 1)						
			Busts of Constantine VI, in chlamys and cr., and of Irene, in loros and cr., facing	 Above, busts of Constantine V, Leo III; and Leo IV, facing, in chlamys and cr. To l. X, to r. N, beneath A		
524 [F1222]	2.28	21		Irene holds gl. cr.	780-90 DOC.5.1-3	1247*
525 [F1493]	2.82	21		Irene lacks gl. cr.	780-90 DOC.6.1-5	1262*
526 [F1068]	1.88	19			780-90 DOC.5.1-6.5	1222*
527 [F1461]	2.13	20			780-90 DOC.5.1-6.5	1218*
528 [F1705]	1.32	19			780-90 DOC.5.1-6.5	1275
(Class 2)						
			Bust of Irene, facing, in loros and cr.	 Above, bust of Constantine VI, facing, in chlamys and cr. To l. X, to r. N, beneath A		
529 [F1002]	1.91	17			792-97 DOC.7.1-15	1222*
530 [F1130]	2.38	17			792-97 DOC.7.1-15	1246*
531 [F1426]	1.99	17			792-97 DOC.7.1-15	1260*

THE CATALOGUES

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
532 [F1468]	2.14	18			792-97 DOC.7.1-15	1262*
533 [F1502]	2.00	17			792-97 DOC.7.1-15	1261*
534 [F1727]	2.63	18			792-97 DOC.7.1-15	1272
535 [F1754]	1.75	18			792-97 DOC.7.1-15	1274
<p>IRENE (797-802) Constantinople Follis</p> <p>ΕΙΡΗ ΗΜΒΑΣ'  Above, cross, Bust, facing, in to l. XXX, loros and cr. to r. NNN, beneath A</p>						
536 [F1020]	4.16	25	ΕΙΡ		797-802 DOC.2.1-4	1219*
<p>NICEPHORUS I (802-811) Constantinople Follis (Class 1)</p> <p>ΗΙ ΝΙΦΟΡ'ΒΑΣ'  Above, cross, Bust, facing, in to l. XXX, chlamys and cr. to r. NNN, ΝΙΦΟΡ[beneath A</p>						
537 [F970]	4.82	23			802-03 DOC.4.1-7	1238*
538 [F981]	4.48	22	ΗΙ ΝΙΦ[		802-03 DOC.4.1-7	1219*
539 [F982]	4.82	22			802-03 DOC.4.1-7	1327*
540 [F1072]	4.23	24	ΗΙ Ν[		802-03 DOC.4.1-7	1223*
541 [F1201]	5.70	26	ΗΙ ΝΙΦ[		802-03 DOC.4.1-7	1247*

SARAÇHANE COIN CATALOGUE

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
542 [F1226C]	7.50	26	h[bAS		802-03 DOC.4.1-7	1247*
543 [F1227A]	5.55	24	hl CIFOR		802-03 DOC.4.1-7	1247*
544 [F1227F]	5.06	22	hl CIFO[]bAS		802-03 DOC.4.1-7	1247*
545 [F1227G]	5.30	21	hl CIFOR' bAS		802-03 DOC.4.1-7	1247*
546 [F1227I]	4.24	24	hl]bA[		802-03 DOC.4.1-7	1247*
547 [F1227L]	6.11	24	]bAS'		802-03 DOC.4.1-7	1247*
548 [F1515]	4.93	22	hl]bA[		802-03 DOC.4.1-7	1234*
549 [F1485]	5.51	22	hl CIFOR' bAS'		802-03 DOC.4.1-7	1261*
550 [F1524]	5.72	24	CIFOR[		802-03 DOC.4.1-7	1158*
(Class 2)						
			Busts of Nicephorus I and Stauracius, facing, in chlamys and cr. Between, +		Above, cross, to l. XXX, to r. NNN, beneath A	
551 [F155]	3.61	22			803-11 DOC.5.1-8	703
552 [F182]	5.82	22			803-11 DOC.5.1-8	704*
553 [F338]	4.87	24			803-11 DOC.5.1-8	546*
554 [F356]	5.96	28			803-11 DOC.5.1-8	1226*
555 [F1004]	3.94	21			803-11 DOC.5.1-8	1346

THE CATALOGUES

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
556 [F1019]	3.05	26			803-11 DOC.5.1-8	1240*
557 [F988]	3.01	22			803-11 DOC.5.1-8	1240*
558 [F1048]	5.13	24			803-11 DOC.5.1-8	1219*
559 [F1050]	4.33	22			803-11 DOC.5.1-8	1222*
560 [F1051]	4.55	23			803-11 DOC.5.1-8	1222*
561 [F1055]	4.42	22			803-11 DOC.5.1-8	1222*
562 [F1057]	5.62	22			803-11 DOC.5.1-8	1242*
563 [F1058]	4.73	23			803-11 DOC.5.1-8	1242*
564 [F1198]	4.45	22			803-11 DOC.5.1-8	1248*
565 [F1202]	3.31	24			803-11 DOC.5.1-8	1247*
566 [F1203]	4.03	22			803-11 DOC.5.1-8	1247*
567 [F1224A]	6.47	24			803-11 DOC.5.1-8	1247*
568 [F1224B]	5.13	25			803-11 DOC.5.1-8	1247*
569 [F1224C]	6.28	25			803-11 DOC.5.1-8	1247*
570 [F1224D]	6.47	25			803-11 DOC.5.1-8	1247*
571 [F1224E]	5.09	22			803-11 DOC.5.1-8	1247*


SARAÇHANE COIN CATALOGUE

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
572 [F1225A]	3.37	22			803-11 DOC.5.1-8	1247*
573 [F1225B]	7.83	27			803-11 DOC.5.1-8	1247*
574 [F1225C]	4.78	24			803-11 DOC.5.1-8	1247*
575 [F1225D]	5.86	24			803-11 DOC.5.1-8	1247*
576 [F1226A]	6.39	27			803-11 DOC.5.1-8	1247*
577 [F1226B]	5.57	23			803-11 DOC.5.1-8	1247*
578 [F1227B]	5.23	25			803-11 DOC.5.1-8	1247*
579 [F1227C]	3.96	23			803-11 DOC.5.1-8	1247*
580 [F1227E]	4.72	25			803-11 DOC.5.1-8	1247*
581 [F1227H]	3.78	25			803-11 DOC.5.1-8	1247*
582 [F1227J]	4.90	26			803-11 DOC.5.1-8	1247*
583 [F1227K]	4.50	24			803-11 DOC.5.1-8	1247*
584 [F1227M]	6.21	24			803-11 DOC.5.1-8	1247*
585 [F1227N]	6.20	24			803-11 DOC.5.1-8	1247*
586 [F1227O]	6.76	24			803-11 DOC.5.1-8	1247*
587 [F1227P]	5.31	24		Overstruck on Leo IV and Constantine VI, Follis, Class 1	803-11 DOC.5.1-8	1247*


THE CATALOGUES

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
588 [F1227Q]	5.08	26		Overstruck on Leo IV and Constantine VI, Follis, Class 1	803-11 DOC.5.1-8	1247*
589 [F1227R]	4.58	27			803-11 DOC.5.1-8	1247*
590 [F1236]	5.29	25			803-11 DOC.5.1-8	1252*
591 [F1341]	5.70	21			803-11 DOC.5.1-8	1255*
592 [F1381]	4.05	21			803-11 DOC.5.1-8	1256*
593 [F1392]	6.17	25			803-11 DOC.5.1-8	1257*
594 [F1395]	4.72	27		Overstruck	803-11 DOC.5.1-8	1256*
595 [F1400]	2.41	20			803-11 DOC.5.1-8	1257*
596 [F1421]	5.18	25			803-11 DOC.5.1-8	1259*
597 [F1453]	4.89	26			803-11 DOC.5.1-8	1259*
598 [F1475]	4.05	23			803-11 DOC.5.1-8	1261*
599 [F1504]	3.95	23			803-11 DOC.5.1-8	1261*
600 [F1509]	5.57	23			803-11 DOC.5.1-8	1262*
601 [F1510]	6.20	24			803-11 DOC.5.1-8	1238*
602 [F1517]	4.60	25			803-11 DOC.5.1-8	1234*
603 [F1711]	5.15	25		To 1. И И И	803-11 DOC.5.1-8	1272

SARAÇHANE COIN CATALOGUE

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
604 [F1719]	4.63	26		Overstruck	803-11 DOC.5.1-8	1272
			LEO V (813-820) Constantinople Follis (Class 1) LE ONBASIL ^s Bust, facing, in chlamys and cr.			
				 Above, cross, to l. XXX, to r. NNN, beneath A		
605 [F1726]	4.73	20	LE ONBAS[		813 DOC.6.1-6	1272
			(Class 2) LEON SC O HST' As previous Busts of Leo V and Constantine facing, in chlamys and cr.			
606 [F573]	5.15	23	LEON SC O HST'		813-20 DOC.7a.1-7i	476*
607 [F1476]	5.70	23	]EO h SC]STAS		813-20 DOC.7a.1-7i	1261*
608 [F1505]	4.97	21	LEON SC ON[		813-20 DOC.7a.1-7i	1261*
609 [F271]	3.60	27	LE[		813-20 DOC.7a.1-7i	384*
610 [F993]	4.21	21	LEO[		813-20 DOC.7a.1-7i	1240*
611 [F994]	4.19	21	LE O]ONS		813-20 DOC.7a.1-7i	1219*
612 [F1017]	2.82	24			813-20 DOC.7a.1-7i	1240*
613 [F1059]	3.31	22			813-20 DOC.7a.1-7i	1242*
614 [F1388]	5.50	23	C h ST		813-20 DOC.7a.1-7i	1255*

THE CATALOGUES

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
615 [F1479]	5.16	22			813-20 DOC.7a.1-7i	1261*
616 [F1514]	4.80	23	LEON		813-20 DOC.7a.1-7i	1234*
<p>MICHAEL II (820-829) Constantinople Follis (Class 2:Small)</p>						
			MIX A HL S ΘEOF' Busts of Michael II and Theophilus, facing. MII wears chlamys and cr., Th. loros and cr.	 beneath, A	Above, cross, to l. XXX, to r. NNN,	
617 [F439]	5.92	20	MIX]HL SΘEOF'		821-29 DOC.8.1-6	563*
618 [F979]	5.10	22	MIXA HLS		821-29 DOC.8.1-6	1325*
<p>(Class 2:Large)</p>						
			MIXAHL SΘEOFILOS As previous, but but between, +	As previous, but beneath, θ		
619 [F78]	5.62	29	A		821-29 DOC.9.1-11	840
620 [F136]	6.97	29			821-29 DOC.9.1-11	700*
621 [F162]	6.13	29			821-29 DOC.9.1-11	703*
622 [F231]	7.83	31	A		821-29 DOC.9.1-11	914*
623 [F939]	6.90	41			821-29 DOC.9.1-11	848*
624 [F986]	6.79	29			821-29 DOC.9.1-11	1219*

SARAÇHANE COIN CATALOGUE

No.	Metal Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
625 [F1009]	6.78	29			821-29 DOC.9.1-11	1222*
626 [F1060]	7.04	28			821-29 DOC.9.1-11	1242*
627 [F1062]	7.41	28			821-29 DOC.9.1-11	1222*
628 [F1147]	7.21	31			821-29 DOC.9.1-11	1246*
629 [F1317]	8.51	32			821-29 DOC.9.1-11	1255*
630 [F1344]	6.92	30	Α		821-29 DOC.9.1-11	1255*
631 [F1481]	7.71	32			821-29 DOC.9.1-11	1261*
632 [F1496]	6.59	28			821-29 DOC.9.1-11	1261*
633 [F1498]	7.54	32	Α		821-29 DOC.9.1-11	1261*
634 [F1501]	8.46	32			821-29 DOC.9.1-11	1261*
635 [F1503]	5.82	29 Corroded			821-29 DOC.9.1-11	1261*
636 [F1852]	4.51	29			821-29 DOC.9.1-11	686*

THEOPHILUS
(829-842)
Constantinople
Follis
(Class 1)

*ΘΕ ΟΦΙΛ'ΒΑΣΙΛ'
Bust, facing, in
chlamys and cr.



Above, cross,
to l. XXX, to
r. NNN,

637 [F1067]	5.85	27	✕		829-830/31 DOC.13.1-11	1222*
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THE CATALOGUES

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
638 [F1359]	7.52	27	*		829-830/31 DOC.13.1-11	Unre- corded
639 [F1465]	5.62	29	*		829-830/31 DOC.13.1-11	1215*
640 [F1478]	7.81	29	*.		829-830/31 DOC.13.1-11	1250*
			(Class 3) ΘΕΟΦΙΛ' ΒΑΣΙΛ' Half-length fig., facing, in loros and tufa, holding labarum on long shaft		+ ΘΕΟ ΦΙΛΕΑΥΓ ΟΥΣΤΕΣ ΝΙΚΑΣ	
641 [F156]	6.97	28			830/31-42 DOC.15a.1-d.7	703
642 [F158]	5.93	29			830/31-42 DOC.15a.1-d.7	702*
643 [F210]	5.76	29			830/31-42 DOC.15a.1-d.7	520*
644 [F211]	8.19	30			830/31-42 DOC.15a.1-d.7	520*
645 [F234]	5.68	25			830/31-42 DOC.15a.1-d.7	540
646 [F283]	4.08	28			830/31-42 DOC.15a.1-d.7	546*
647 [F285]	6.69	26			830/31-42 DOC.15a.1-d.7	384*
648 [F392]	10.00	28			830/31-42 DOC.15a.1-d.7	1227*
649 [F473]	4.09	28			830/31-42 DOC.15a.1-d.7	1016*
650 [F1052]	7.40	29			830/31-42 DOC.15a.1-d.7	1222*
651 [F1118]	6.25	28			830/31-42 DOC.15a.1-d.7	1249*

SARAÇHANE COIN CATALOGUE

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
652 [F1280]	6.19	29			830/31-42 DOC.15a.1-d.7	1252*
653 [F1283]	6.29	28			830/31-42 DOC.15a.1-d.7	1213*
654 [F1320]	7.86	20			830/31-42 DOC.15a.1-d.7	1255*
655 [F1328]	5.74	31	]OF BASI[		830/31-42 DOC.15a.1-d.7	1213*
656 [F1464]	5.92	28 Corroded			830/31-42 DOC.15a.1-d.7	1262*
657 [F1466]	4.70	27		Overstruck	830/31-42 DOC.15a.1-d.7	1262*
658 [F1467]	5.68	29			830/31-42 DOC.15a.1-d.7	1262*
659 [F1469]	7.81	27			830/31-42 DOC.15a.1-d.7	1262*
660 [F1470]	5.23	26			830/31-42 DOC.15a.1-d.7	1262*
661 [F1495]	7.24	29			830/31-42 DOC.15a.1-d.7	1262*
662 [F1543]	7.46	28	ΘΕΟΦΛ]AS[		830/31-42 DOC.15a.1-d.7	1285*
663 [F1573]	6.06	27			830/31-42 DOC.15a.1-d.7	1287*
664 [F1760]	6.24	31			830/31-42 DOC.15a.1-d.7	1278*
			As previous	Half-follis As previous		
665 [F134]	5.06	21			830/31-42 DOC.16a.1-c	700*
666 [F219]	2.73	27			830/31-42 DOC.16a.1-c	536*

THE CATALOGUES

No.	Metal [Æ] Wt.]gm]	Size	Reverse	Obverse	Date/Ref.	Prove- nance
667 [F1025]	3.36	25			830/31-42 DOC.16a.1-c	1240*
668 [F1046]	3.56	22			830/31-42 DOC.16a.1-c	1219*
669 [F1109]	3.75	26			830/31-42 DOC.16a.1-c	1249*
670 [F1471]	3.67	24			830/31-42 DOC.16a.1-c	1250*
671 [F1497]	3.62	24			830/31-42 DOC.16a.1-c	1261*
672 [F1507]	0.45	11 fragment			830/31-42 DOC.16a.1-c	1233*
Uncertain Provincial Mint Follis						
			As previous but crude style	As previous but crude style		
673 [F282]	6.62	29			830/31-42 DOC.17.1-7	546*
674 [F1016]	6.41	25			830/31-42 DOC.17.1-7	1240*
675 [F1153]	7.44	31			830/31-42 DOC.17.1-7	1249*
676 [1156]	6.59	28			830/31-42 DOC.17.1-7	1249*
BASIL I (867-886) Constantinople Follis (Class 2)						
			Basil I and Constan- tine std. facing, in loros (simplified type) and cr.	+bASIL(Ι)O SCOHSTAN TINOHENΘO bASILEISR OMAION		
677 [F1612]	8.73	26	+bASILO SCCOHSTbASILS	+ bASILO	868-70 DOC.9b.1-6	Unre- corded

SARAÇHANE COIN CATALOGUE

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
678 [F228]	6.98	27	basilio scohstaqqq	+basilo'	868-70 DOC.9d.1-5	900
679 [F441]	5.64	28			868-70 DOC.9a.1-d.5	1231*
680 [F944]	7.31	28	+b]sl[	Overstruck on Theophil- us, Follis Class 3	868-70 DOC.9a.1-b.6(?)	1323*
(Class 3)						
			+leobasilscostaqgq'	+basil		
			Half-length figs. of Leo, Basil I, and Constantine, facing, B.I wears loros (tra- ditional type) and cr., L. and C. wear chlamys and cr.	costan tsleohen θobasils romeon		
681 [F382]	4.54	30 3 pc			870-79 DOC.10a.1-e.2	453
(Class 4)						
			+leobasil costaqgq'	As previous, but B.I wears loros (simplified type), raises l. hand		
682 [F264]	5.36	27			870-79 DOC.11.1-17	545*
(Class 3/4)						
683 [F80]	4.81	23			870-79 DOC.10a.1-11.17	791*
684 [F83]	5.90	23	leobasil'c[		870-79 DOC.10a.1-11.17	792*
685 [F1285]	6.25	37	]nbasilscostaq[	Overstruck on Basil I, Follis, Unc. Prov. Mint	870-79 DOC.10a.1-e.2(?)	1252*
686 [F1397]	3.94	24	+leobas[]scostaq[	Beneath *	870-79 DOC.10a.1-e.2(?)	1257*

THE CATALOGUES

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
<p>Uncertain Provincial Mint(?)</p> <p>+bASILIOSSCONST'AY99 Busts of Basil I and Constantine, facing, in chlamys and cr., holding labarum on long shaft</p> <p>+bASIL SCOHSTAN TlhoSenō BASILEISR OMAION</p>						
687 [F212]	6.39	27			868-70 DOC.8a.1-4 (Cpl. Class 1)	520*
688 [F213]	7.09	28			868-70 DOC.8a.1-4 (Cpl. Class 1)	520*
689 [F268]	4.50	27			868-70 DOC.8a.1-4 (Cpl. Class 1)	601*
690 [F1042]	3.68	24		OMAOH	868-70 DOC.8b (Cpl. Class 1)	1240*
691 [F1327]	4.50	28		OMAOH	868-70 DOC.8b (Cpl. Class 1)	1214*
692 [F1545]	3.32	25		OMAOH	868-70 DOC.8b (Cpl. Class 1)	1285*
<p>LEO VI (886-912) Constantinople Follis (Class 2)</p> <p>+LEON SALEIANOROS Léo VI and Alexander std. facing in loros and cr. holding between them labarum</p> <p>+LEOH SALEIAN GROSBASIL' ROMEON</p>						
693 [F216]	6.70	26			886-912 DOC.6.1-23	536*
694 [F267]	7.29	26			886-912 DOC.6.1-23	601*

SARAÇHANE COIN CATALOGUE

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
695 [F992]	10.50				886-912 DOC.6.1-23	1240*
696 [F1056]	5.75	26	(Class 3) +LEONBAS ILEVSROM' Bust, facing, in chlamys and cr.	+LEON ΕΗΘΕΟΒΑ SILEVSR ΟΜΕΟΗ	886-912 DOC.6.1-23	1222*
697 [F79]	5.33	26			886-912 DOC.8.1-63	789*
698 [F82]	5.01	26			886-912 DOC.8.1-63	791*
699 [F152]	5.65	28			886-912 DOC.8.1-63	702*
700 [F157]	5.33	27			886-912 DOC.8.1-63	703*
701 [F202]	6.95	25			886-912 DOC.8.1-63	519
702 [F206]	6.49	24			886-912 DOC.8.1-63	1000*
703 [F215]	8.78	28			886-912 DOC.8.1-63	536*
704 [F381]	2.60	25			886-912 DOC.8.1-63	1081*
705 [F1005]	5.67	24			886-912 DOC.8.1-63	1222*
706 [F1010]	4.66	25			886-912 DOC.8.1-63	1240*
707 [F1015]	6.39	26			886-912 DOC.8.1-63	1222*
708 [F437]	6.47	24			886-912 DOC.8.1-63	341*
709 [F718]	4.81	26			886-912 DOC.8.1-63	1118*

THE CATALOGUES

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
710 [F732]	1.59	23 Corroded			886-912 DOC.8.1-63	610*
711 [F971]	5.74	25			886-912 DOC.8.1-63	1238*
712 [F1244]	6.93	27			886-912 DOC.8.1-63	1252*
713 [F1270]	5.63	27			886-912 DOC.8.1-63	1213*
714 [F1277]	7.06	27			886-912 DOC.8.1-63	1252*
715 [F1279]	6.13	25			886-912 DOC.8.1-63	1213*
716 [F1282]	7.14	28			886-912 DOC.8.1-63	1213*
717 [F1289]	6.60	27			886-912 DOC.8.1-63	1213*
718 [F1295]	4.58	25			886-912 DOC.8.1-63	1213*
719 [F1297]	7.47	27			886-912 DOC.8.1-63	1213*
720 [F1298]	4.40	24			886-912 DOC.8.1-63	1213*
721 [F1324]	6.52	26			886-912 DOC.8.1-63	1254*
722 [F1326]	6.02	28			886-912 DOC.8.1-63	1214*
723 [F1348]	4.33	26			886-912 DOC.8.1-63	1010
724 [F1409]	6.56	25			886-912 DOC.8.1-63	1262*
725 [F1539]	9.79	29			886-912 DOC.8.1-63	1285*

SARAÇHANE COIN CATALOGUE

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
726 [F1542]	3.00	24			886-912 DOC.8.1-63	1285*
727 [F1544]	4.88	25			886-912 DOC.8.1-63	1285*
728 [F1571]	5.99	25			886-912 DOC.8.1-63	1286*
729 [F1574]	5.37	27			886-912 DOC.8.1-63	1286*
730 [F1645]	5.16	25			886-912 DOC.8.1-63	1181*
731 [F1717]	6.30	26			886-912 DOC.8.1-63	1272
732 [F1718]	5.44	27			886-912 DOC.8.1-63	1272
733 [F1721]	5.25	26			886-912 DOC.8.1-63	1272
734 [F1751]	3.36	25			886-912 DOC.8.1-63	1274
735 [F1916]	5.52	21			886-912 DOC.8.1-63	1455
<p>Uncertain Provincial Mint(?) Follis(?) As Cpl. Follis, As Cpl. Follis, Class 2, but crude Class 2, but crude style style</p>						
736 [F1766]	5.41	27			886-912 DOC.7a.1-7b (Cpl. Class 2, Half-follis)	1278
<p>CONSTANTINE VII (913-959) Constantinople Follis (Class 1:Const.VII and Zoe)</p>						

THE CATALOGUES

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
			+CONSTANT'CEZOHb' Busts of Constantine VII and Zoe, facing, holding between them patriarchal cross. C.VII wears loros (traditional type) and cr., Z. wears chlamys and cr.	+CONS TANTINO CEZOHbA' SILISRO MEON		
737 [F32]	6.11	25			914-19 DOC.22.1-23	Unre- corded
738 [F119]	7.85	24			914-19 DOC.22.1-23	Unre- corded
739 [F153]	6.34	25			914-19 DOC.22.1-23	702*
740 [F989]	7.23	26			914-19 DOC.22.1-23	1219*
			(Class 4: Romanus I)			
			+ROMAN'basilevsrom' Bust, facing, in chlamys and cr.	+ROMA n'enθewba silevsrw MAIΩN		
741 [F120]	3.79	26			931-44 DOC.25a.1-17	
742 [F161]	5.25	22			931-44 DOC.25a.1-17	702*
743 [F854]	6.46	27		Lacks second line of inscr.	931-44 DOC.25a.1-17	1292
744 [F1541]	6.77	27		Overstruck	931-44 DOC.25a.1-17	1285*
745 [F238]	6.68	26		Overstruck	931-44 DOC.25b.1-24	809*
746 [F355]	5.30	26		Overstruck on Leo VI, Class 3(?)	931-44 DOC.25b.1-24	1226*
747 [F477]	5.89	27			931-44 DOC.25b.1-24	1016*

SARAÇHANE COIN CATALOGUE

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
748 [F717]	6.39	25		Overstruck(?)	931-44 DOC.25b.1-24	1060*
749 [F1008]	3.71	23			931-44 DOC.25b.1-24	1222*
750 [F1043]	8.38	28		Overstruck on Leo VI, Class 3	931-44 DOC.25b.1-24	1242*
751 [F1226D]	5.70	25			931-44 DOC.25b.1-24	1247*
752 [F1292]	5.76	27			931-44 DOC.25b.1-24	1214*
753 [F1611]	7.17	27			931-44 DOC.25b.1-24	Unre- corded
754 [F1624]	5.60	26			931-44 DOC.25b.1-24	1272
755 [F1709]	3.86	26			931-44 DOC.25b.1-24	1272
756 [F1728]	5.05	27			931-44 DOC.25b.1-24	1272
757 [F1734]	6.12	25			931-44 DOC.25b.1-24	1274
758 [F117]	3.79	26			931-44 DOC.25c.1-13	Unre- corded
759 [F237]	4.29	25 worn			931-44 DOC.25c.1-13	809*
760 [F818]	4.09	26			931-44 DOC.25c.1-13	929*
761 [F1267]	4.10	24			931-44 DOC.25c.1-13	1213*
762 [F1276]	6.27	27		Overstruck on Leo VI, Class 3	931-44 DOC.25c.1-13	1213*
763 [F1294]	3.64	27			931-44 DOC.25c.1-13	1213*

THE CATALOGUES

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
764 [F1296]	5.58	28			931-44 DOC.25c.1-13	1213*
765 [F1321]	5.91	27			931-44 DOC.25c.1-13	1255*
766 [F1575]	6.36	25		Overstruck on Leo VI, Class 3	931-44 DOC.25c.1-13	1286*
767 [F1618]	6.48	26			931-44 DOC.25c.1-13	1323*
768 [F1706]	4.46	27			931-44 DOC.25c.1-13	1272*
(Class 5: Constantine VII)						
			+CONST'BA SIL'ROM'	+CONST'		
			Bust, facing, in	ENΘEOBA		
			loros (simplified	SILEVSR		
			type) and cr.	OMEON		
769 [F1869]	7.39	27			945-c.50 DOC.26.1-28	1072
770 [F1735c]	3.73	23			945-c.50 DOC.26.1-28	1272
771 [F1716]	5.18	25			945-c.50 DOC.26.1-28	1272
772 [F1664]	2.64	23			945-c.50 DOC.26.1-28	1365
773 [F1642]	1.53	21 corroded			945-c.50 DOC.26.1-28	1378*
774 [F1572]	2.68	20			945-c.50 DOC.26.1-28	1287*
775 [F1508]	5.15	24			945-c.50 DOC.26.1-28	1233*
776 [F1488]	6.66	25			945-c.50 DOC.26.1-28	1234*
778 [F1360]	7.37	30			945-c.50 DOC.26.1-28	1255*




























SARAÇHANE COIN CATALOGUE

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
779 [F1332]	4.90	28		Overstruck on Leo VI, Class 3	945-c.50 DOC.26.1-28	1254*
780 [F1323]	6.18	26			945-c.50 DOC.26.1-28	1255*
781 [F1286]	5.95	26			945-c.50 DOC.26.1-28	1213*
782 [F1275]	4.38	26			945-c.50 DOC.26.1-28	1252*
783 [F1274]	4.85	28			945-c.50 DOC.26.1-28	1213*
784 [F1250]	6.50	27			945-c.50 DOC.26.1-28	1345
785 [F1242]	3.93	25		Overstruck on Class 4	945-c.50 DOC.26.1-28	1252*
786 [F1240]	4.48	25			945-c.50 DOC.26.1-28	1252*
787 [F1237]	4.35	25			945-c.50 DOC.26.1-28	1252*
788 [F1069]	5.71	28			945-c.50 DOC.26.1-28	1222*
789 [F968]	3.65	24			945-c.50 DOC.26.1-28	1238*
790 [F918]	7.88	26			945-c.50 DOC.26.1-28	1046*
791 [F716]	6.49	26			945-c.50 DOC.26.1-28	1011*
792 [F515]	4.79	26			945-c.50 DOC.26.1-28	1016*
793 [F500A]	8.18	25			945-c.50 DOC.26.1-28	564*
794 [F1011]	5.86	23			945-c.50 DOC.26.1-28	1222*












THE CATALOGUES

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
795 [F218]	8.64	26		Overstruck on Class 4	945-c.50 DOC.26.1-28	1002
796 [F81]	4.86	25		Overstruck on Class 4	945-c.50 DOC.26.1-28	791*
			(Class 6:Const.VII and Romanus II) +CONST' CEROMAN' b' ROM' + CONST' Busts of Constantine VII and Romanus II, facing, holding be- tween them globus sur- mounted by patriarchal cross. C.VII wears loros (simplified type) and cr., R.II wears loros (traditional type) and cr.			
797 [F300]	1.49	22 fragment			c.950-59 DOC.27.1-8	1204
798 [F1239]	5.46	25			c.950-59 DOC.27.1-8	1252*
			NICEPHORUS II (963-969) Constantinople Follis (Class 1) +NICIFR b AGILEVRW +NICIF Bust, facing, in scaramangion(?) and cr. ENΘEW bA SILEVSRW MAIWN			
799 [F1322]	2.88	25			963-69 DOC.7.1-16	1255*
			'ANONYMOUS FOLLES' Constantinople (Class A 1) +EMMA NOVHA +IH S Y S Bust of Christ facing, bearded and nimbate XPIST Y S bASILEY' bASILE'			
800 [F811]	6.04	28		Overstruck on Constan- tine, Class 5	970-76(?) DOC.A1.1-14	922*

SARAÇHANE COIN CATALOGUE

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
801 [F972]	4.96	23			970-76(?) DOC.A1.1-14	1238*
802 [F1251]	4.07	25			970-76(?) DOC.A1.1-14	1010
803 [F1898]	7.74	25			970-76(?) DOC.A1.1-14	Unre- corded
(Class A 2)						
			As previous	As previous		
804 [F2]	6.33	27		Beneath •	976(?)–1030/35 DOC.Var.5(?)	Unre- corded
805 [F132]	9.94	29		Beneath •	976(?)–1030/35 DOC.Var.3/5(?)	700*
806 [F147]	12.54	31	Cross 	Beneath •	976(?)–1030/35 DOC.Var.3/5(?)	701*
807 [F812]	11.39	29		Beneath •	976(?)–1030/35 DOC.Var.5(?)	922*
808 [931]	14.85	32	Cross 	Beneath 	976(?)–1030/35 DOC.Var.8(?)	1060*
809 [F1964]	13.29	34	Cross  ; book 	Above,  , beneath, 	976(?)–1030/35 DOC.Var.8	411
810 [F1522]	14.38	34		Above,  , beneath, 	976(?)–1030/35 DOC.Var.9	1365
811 [F720]	14.89	31	Cross 	Above,  , beneath, 	976(?)–1030/35 DOC.Var.14b/24	1118*
812 [F762]	16.41	33	Cross  , book 	Above,  , beneath, 	976(?)–1030/35 DOC.Var.23	1065*
813 [F1745]	8.36	30	Cross  , book 	Above,  , beneath, 	976(?)–1030/35 DOC.Var.41	1193
814 [F697]	6.08	25	Cross  , book 	Beneath, 	976(?)–1030/35 DOC.Var.41(?)	795*
815 [F227]	14.68	35	Cross  , book  (?)	Above,  , beneath 	976(?)–1030/35 DOC.Var.--	900

THE CATALOGUES

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
816 [F200]	13.31	30	Cross  , book  (?)	Beneath, •	976(?)–1030/35 DOC.Var.--(?)	898
817 [F1366]	5.18	24	Cross  , book  (?)	Above, •	976(?)–1030/35 DOC.Var.--(?)	1250*
818 [F49]	8.22	29			976(?)–1030/35 DOC.Var.(?)	237
819 [F60]	10.61	36			976(?)–1030/35 DOC.Var.(?)	89
820 [F898]	9.01	30 corroded			976(?)–1030/35 DOC.Var.(?)	1299
821 [F1667]	6.85	30 broken			976(?)–1030/35 DOC.Var.(?)	1184*
822 [F1930]	11.36	32	Cross 		976(?)–1030/35 DOC.Var.(?)	1428*
823 [F1938]	12.76	30			976(?)–1030/35 DOC.Var.(?)	1281*
824 [F1380]	8.57	29	Cross  , book 	Blundered inscr. contemp. forgery(?)	976(?)–1030/35 DOC.Var.(?)	936*
			(Class B) As previous	  bAS lLe bAS lLe	Cross on base and two steps	
825 [F508]	9.66	30			1030/35–1042(?) DOC.B.1–64	1016*
826 [F1358]	7.44	28			1030/35–1042(?) DOC.B.1–64	1381
			(Class C) +EMMA NOVHA Three-quarter length fig. of Christ, facing, bearded and nimbate	  NI KA cross	In angles of jeweled	
827 [F1715]	9.55	27			1042(?)– c.1050 DOC.C.1–48	1272

SARAÇHANE COIN CATALOGUE

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
828 [F1744]	10.94	31			1042(?)– c.1050 DOC.C.1–48	1442
829 [F1941]	6.54	27			1042(?)– c.1050 DOC.C.1–48	1204
			(Class D) Christ, bearded and nimbate, std. facing on throne with back	— + — ISXS bASILE bASIL — U —		
830 [F956]	8.40	31			c.1050–c.60 DOC.D.1–34	1009*
831 [F48]	6.47	28			c.1050–c.60 DOC.D.1–34	
			(Class F) Christ, bearded and nimbate, std. facing upon throne without back	— + — IS XS bASILE bASIL +		
832 [F138]	7.26	29			c.1060–c.65 DOC.F.1–15	871*
			(Class G) Bust of Christ, facing, bearded and nimbate, within borders of large pellets	Bust of Virgin, facing, nimbate and orans, within borders of large pellets		
833 [F764]	6.36	27			c.1065–c.70 DOC.G.1–28	1065*
834 [F1635]	4.39	26			c.1065–c.70 DOC.G.1–28	1272
835 [F917]	0178	22		Thin fabric, contemp. forgery(?)	c.1065–c.70 DOC.G.1–28	1046*
			(Class I) Bust of Christ, facing, bearded and nimbate	Cross, on floreate base		

THE CATALOGUES

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
836 [F1029]	3.84	23			c.1075-c.80 DOC.I.1-64	1219*
837 [F1098]	4.41	23			c.1075-c.80 DOC.I.1-64	1220*
(Class K)						
			Bust of Christ, facing, bearded and nimbate, within border of large pellets	Half-length fig. of Virgin, facing, nimbate, within border of large pellets		
838 [F1725]	6.82	26			c.1085-92 DOC.K.1-26	1272
839 [F1740]	4.73	23			c.1085-92 DOC.K.1-26	1181*
ROMANUS IV (1068-1071) Thessalonica(?) Follis						
			Bust of Christ, facing, bearded, with cross behind head	C R P Δ	In angles of cross	
840 [F145]	5.28	25			1068-71 DOC.8.1-19	701*
841 [F700]	4.66	26		Overstruck on Class G	1068-71 DOC.8.1-19	1118*
NICEPHORUS III (1078-1081) Thessalonica(?) Follis						
			Three-quarter length fig. of Christ, facing, bearded and nimbate	C Φ N Δ circle and star at center	In angles of cross w. circle and star at center	
842 [F1150]	6.82	22			1078-81 DOC.9.1-20	1223*
ALEXIUS I (1081-1118) Constantinople Tetarteron						

SARAÇHANE COIN CATALOGUE

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
			Christ, bearded and nimbate, seated upon throne without back	+ΛΛΕΞΙΩ ΔΕC Bust, facing, in chlamys and cr.		
843 [F913]	3.57	19		+ΛΛCΞΙΩ ΔCC	1092-1118 DOS.xii, pp.87-88	1297*
			Thessalonica Tetarteron (Pre-Reform:Second Coinage)			
			Christ, bearded and nimbate, seated facing upon throne without back	+ΛΛΕΞ ΔΕCΠΟΤΤΟΚ Bust, facing, in jeweled loros (simpli- fied type) and cr.		
844 [F1482]	E1./B 3.78	15		+ΛΛ[ΔΕ[	1081-92 DOS.xii, p.73	1261*
			(Post-Reform:Third Coinage)			
			C Φ In angles M Δ of jeweled cross on steps	+ΤΩΚΟ ΜΝΗ Bust, facing in jeweled loros (traditional type) and cr.		
845 [F689]	3.69	22			1092-1118 DOS.xii, p.88	497*
846 [F861]	2.51	18			1092-1118 DOS.xii, p.88	Unre- corded
847 [F1040]	2.06	21			1092-1118 DOS.xii, p.88	1272
			(Type D)			
			Λ Δ Patriarchal K Φ cross on steps	+ΛΛΕ ΞΙ Bust, facing, in jeweled loros (traditional type) and cr.		
848 [F194]	1.67	16		]ΛΛ[	1092-1118 DOS.xii, p.88	Unre- corded
849 [F1931]	2.24	12	Rev. incuse		1092-1118 DOS.xii, p.88	971
850 [F1963]	1.48	15			1092-1118 DOS.xii, p.88	411

THE CATALOGUES

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
JOHN II (1118-1143) Constantinople Trachy (Second Coinage)						
			Bust of Christ, facing, bearded and nimbate	†ΙΩΔΕCΠΟΤΤ ΠΦΥΡΟΓΝΤ Bust, facing, in panel- ed loros (simplified type) and cr.		
851 [F137]	B. 3.46	29		Scepter has no trans- verse stroke on shaft (var. A)	1118-43 DOS.xii, p.105	833*
Tetarteron (Type A)						
			Full-length fig. of Christ, bearded and nimbate, stg. facing	†ΙΩΔΕCΠΟΤ ΤΩΠΟΡΦΥΡΟΓΝΤ Full-length fig. of John II, stg. facing, in jeweled loros (simplified type) and cr.		
852 [F1608]	3.43	18		]ΠΟΤ[	1118-43 DOS.xii, p.106	1165*
853 [F649]		21		ΙΩΔΕCΠΟΤΗ ΤΟΠΟΡΦΥΡΟΓΝ	1118-43 DOS.xii, p.106	564*
Thessalonica						
			Virgin, nimbate, std. facing on throne without back	ΙΩ ΔΕCΠΟΤ ΤΩ ΠΟΡΦΥΡΟΓΕ ΝΗΤ in columnar form. Full-length fig. of John II stg. facing, in jeweled loros (tradi- tional type) and cr.		
854 [F366]	B. 4.23	30		ΙΩ Φ ΔΕC Ρ ΠΟΤ Γ ΤΩ ΝΗ ΠΟΡ Τ	1118-43 DOS.xii, p.105	955*
Half-tetarteron (Type A)						
			Full-length fig. of Christ, stg. facing, bearded and nimbate	†ΙΩΔΕC ΠΟΤΗ Bust, facing, in chlamys and cr.		

SARAÇHANE COIN CATALOGUE

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
855 [F1299]	1.49	16		ΙΩΔ[	1118-43 DOS.xii, pp.106-07	Unre- corded
856 [F1336]	0.32	13			1118-43 DOS.xii, pp.106-07	1255*
(Type B)						
			⊙ T Bust of St. ΔΙ ΠΙ Demetrius, ΜΙ Ο facing, in mil. dress	+ΙΩ ΔΕC Bust, facing, in panel- ed loros (simplified type) and cr.		
857 [F874]	1.99	17	⊙ T ΔΙ ΠΙ ΜΙ ΟC		1118-43 DOS.xii, p.107	1293
MANUEL I (1143-1180) Constantinople Trachy (Third Coinage:2nd. Ph.) Virgin, nimbate, std. ΜΑΝΒΗΛ ΔΕCΠΟΤΗC facing upon throne Full length fig. of without back Manuel I stg. facing in chlamys and cr.						
858 [F1746]	B. 5.16	29		Three dots on shaft of labarum (Var. D)	1143-80 DOS.xii, pp.117-18	1193
(Fourth Coinage) Christ, bearded and nimbate, std. facing upon throne without back ΜΑΝΒΗΛ ΔΕCΠΟΤ Full-length fig. of Manuel I, stg. facing, in jeweled loros (simplified type) and cr., crowned by Virgin						
859 [*1634]	B. 4.65	27		Var. B(α)(?)	1143-80 DOS.xii, pp.118-19	1272
860 [*1651]	B 2.62	29		Var. D(α)	1143-80 DOS.xii, pp.118-19	1323*

THE CATALOGUES

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
Tetarteron (Type B)						
			Full-length fig. of Virgin stg to r., nimbate and orans	MANΘΗΛ ΔΕCΠΟΤΗC Full-length fig. of Manuel I stg. facing, in jeweled loros (simplified type), sagion, and cr.		
861 [*104]	3.57	20		MANΘΗΛ ΔΕC[	1143-80 DOS.xii, p.119	859
862 [*121]	2.52	18			1143-80 DOS.xii, p.119	
(Type D)						
			Bust of Virgin, orans, facing	MANΘΗΛ ΔΕC Bust, facing, in chlamys and cr.		
863 [*58]	4.04	24		MAN[ΔΕ[	1143-80 DOS.xii, p.120	100
Thessalonica Tetarteron (Type A:Heavy St.)						
			Γ ^Θ Ε ^Θ Bust of St. George facing, in mil. dress	MANΘΗΛ ΔΕCΠΟΤ Bust, facing, in jeweled loros (simplified type) and cr.		
864 [*260]	2.43	19	Γ ^Θ Ε ^Θ	MANΘ ΗΛ ΔΕC	1143-80 DOS.xii, p.120	368
865 [*1204]	2.01	22	Γ ^Θ Ε ^Θ	]ΝΘΗ[	1143-80 DOS.xii, p.120	1251*
Uncertain Greek Mint Half-tetarteron (Type B:Light St.)						
			As Thess. Tetarteron, Type A	As Thess. Tetarteron, Type A		
866 [F50]	0.75	14			1143-80 DOS.xii, pp.121-22	237

SARAÇHANE COIN CATALOGUE

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
<p>ANDRONICUS I (1182/83-1185) Thessalonica (Type A)</p>						
			Bust of Virgin, orans, facing	ΑΝΔΡΟ ΝΙΚΟC Bust, facing, in scaramangion and cr.		
867 [F1617]	2.65	20			1182/83-85 DOS.xii, pp.133-34	1167*
<p>ISAAC II (1185-1195) Constantinople Trachy</p>						
			Virgin, std. facing on throne with back	ΙCΑΑΚΙΟC ΔΕCΠΟΤΗC Full-length fig. of Isaac II, stg. facing, in jeweled loros (simplified type), sagion, and cr.		
868 [F368]	B. 4.43	29		Var. A(a)(?)	1185-95 DOS.xii, pp.144-45	955*
869 [F370]	B. 3.15	29		Var. A(a)(?)	1185-95 DOS.xii pp.144-45	955*
870 [F374]	B. 3.63	31		Var. A(a)	1185-95 DOS.xii, pp.144-45	955*
871 [F365]	B. 5.02	30		Var. A(b)	1185-95 DOS.xii, pp.144-45	955*
872 [F367]	B. 3.68	29		<div style="display: inline-block; vertical-align: middle; text-align: center;"> Ι ΑΑ ΚΙ ΟC </div> <div style="display: inline-block; vertical-align: middle; text-align: center;"> C O T H </div> Var. A(b)	1185-95 DOS.xii, pp.144-45	955*
873 [F369]	B. 3.32	28		Var. A(b)(?)	1185-95 DOS.xii, pp.144-45	955*

THE CATALOGUES

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
874 [F872]	B. 3.29	29		Var. A(b) (?)	1185-95 DOS.xii, pp.144-45	955*
875 [F373]	B. 4.37	29		ΑΙ ΔΕC Π Ο Τ Η C	Var. A(b) 1185-95 DOS.xii, pp.144-45	955*
876 [F448]	B. 5.22	29		Α Κ Ι C ΔΕC Π Ο Τ	Var. B(b) 1185-95 DOS.xii, pp.144-45	1015*
877 [F371]	B. 4.85	29			1185-95 DOS.xii, pp.144-45	955*
<p>ALEXIUS III (1195-1203) Constantinople Trachy Bust of Christ, facing, bearded and nimbate</p>						
				<p>ΑΛΕΞΙΟΥΔΕCΠ Θ ΚΩΝCΤΑΝΤ or ΑΛΕΞΙΩΔΕCΠ Θ ΤΩΚΟΜΗΝΩ Alexius III and St. K/ Constantine stg. facing, in jeweled loros (simpli- fied type) and cr.</p>		
878 [F354]	B. 3.46	32	(Lacks ΚΕΡΟ ΗΘΕΙ)	Var. A	1195-1203 DOS.xii, p.151	309*
879 [F204]	B. 2.83	23			1195-1203 DOS.xii, p.151	900
880 [F734]	B.	25			1195-1203 DOS.xii, p.151	1062*
<p>LATIN IMITATIVE COINAGE Large Module Constantinople Trachy (Type A) Virgin, nimbate, std. facing upon throne with back</p>						
				<p>ΜΑΝΟΒΗΛ ΔΕCΠΟΤΗC or ΜΑΝΟΒΗΛ ΠΟΡΦΥΡΟΓΕΝ Full-length fig. of emp. stg. facing in chlamys and cr. In r. hand holds labarum</p>		

SARAÇHANE COIN CATALOGUE

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
881 [F1895]	B. 2.19	26			1204-61 DOS.xii, p.191	1393
			(Type B) Christ, bearded and nimbate, std. facing upon throne with back	As previous Full-length fig. of emp. stg. facing in chlamys and cr. In r. hand holds sword, point resting on ground		
882 [F840]	B. 3.95	26			1204-61 DOS.xii, p.191	922*
			(Type C) Virgin, nimbate, std. facing upon throne with back	ΛΛΕΞΙΟΣ ΔΕΣΠΟΤ Emp. std. facing in paneled loros (simpli- fied type) and cr.		
883 [F105]	B. 1.58	22			1204-61 DOS.xii, p.192	729
			(Type D) Bust of Christ, beardless and nimbate	ΜΑΝΟΥΗΛ ΔΕΣΠΟΤΗΣ Emp., stg. facing, in jeweled loros (simpli- fied type), sagion, and cr. Holds scepter cruciger and gl. cr.		
884 [F458]	B. 2.10	24			1204-61 DOS.xii, p.192	1016*
			(Type E?) As previous	As previous As previous, but holds labarum-headed scepter and globus surmounted by patriarchal cross		
885 [F112]	B. 0.75	17			1204-61 DOS.xii, p.192(?)	1101*
			(Type U) Full-length fig. of St. John Baptist stg. facing	Full-length fig. of St. Nicholas stg. facing		

THE CATALOGUES

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
886 [F38]	B. 1.29	22			1204-61 DOC. iv	187
Thessalonica (Type A)						
			Christ, bearded and nimbate, std. facing, upon throne without back	Half-length fig. of emp. in paneled loros (simplified type) and cr.		
887 [F911]	B. 2.31	20			1204-61 DOS.xii, p.196	1075*
(Type C)						
			Christ, bearded and nimbate, std. facing, on throne without back. To r. +	ΗΑΓΙΑΕΛΕΝΕ ΘΚΟΝΑΝΤ SS. Constantine and Helena stg. facing, in jeweled loros (simpli- fied type) and cr., holding between them patriarchal cross		
888 [F175]	B. 2.77	33		]ϵ N[ \odot[	1204-24 DOS.xii, p. 197	1112*
Small Module Trachy (Type A)						
			As Large Mod. Cpl. Type A	As Large Mod. Cpl. Type A		
889 [F736]	B. 1.95	20			1204-61 DOS.xii, p.198	940*
JOHN III(?) (1222-1254) Magnesia(?) Trachy						
			Full-length fig. of Christ stg. facing (?)	Bust of emp., in loros and cr. Holds in r. hand scepter cruciger, and in l. gl. cr.(?)		
890 [F422]	B. 1.26	25			1222-54(?)	Unre- corded

SARAÇHANE COIN CATALOGUE

No.	Metal [Æ] Wt. [gm]	Size	Obverse	Reverse	Date/Ref.	Prove- nance
<p>MICHAEL VIII (1258-1282) Constantinople Trachy (Type C. 18)</p> <p>Seraph, facing, with four wings</p> <p>Full-length fig. of Michael VIII, in paneled loros (simplified type) and cr., std. facing</p>						
891 [F123]	B. 1.68	22		<p>ο πλ</p> <p>ο π[</p>	1251-82 Bendall, p.13	Unre- corded

In addition to the above catalogued items, some general identification was possible of 151 Byzantine and earlier coins and 11 Turkish coins. These are listed below, the serial number prefixed with the letter A (= Additional to main catalogue). 115 unidentifiable fragments are omitted.

No.	Metal [Æ] Wt. [gm]	Size	Denom.	Date	Prove- nance
A892 [F207]	4.86	21		Greek imperial?	520*
A893 [F333]	1.92	12		330-5	402*
A894 [F1247]	1.15	17		355-61	Unrecorded
A895 [F1460]	1.79	18		378-83	1362*

THE CATALOGUES

No.	Metal [Æ] Wt. [gm]	Size	Denom.	Date	Prove- nance
A896 [F312]	0.92	13		Arcadius/Honorius (383-95)	395*
A897 [F1165]	0.82	14		Arcadius (393-5?)	1223*
A898 [F1957]	1.69	16		4th c.	411
A899 [F1954]	1.20	16		4th c.	413
A900 [F1683]	1.00	13		4th c.	1299
A901 [F1659]	0.78	13		4th c.	1323*
A902 [F1650]	1.07	14		4th c.	1272*
A903 [F1520]	1.16	12		4th c.	1381
A904 [F1340]	0.62	14		4th c.	1215*
A905 [F1125]	1.55	16		4th c.	1220*
A906 [F938]	1.00	12		4th c.	1070*
A907 [F916]	2.12	16		4th c.	1033*
A908 [F456]	1.42	14		4th c.	562*
A909 [F337]	1.89	18		4th c.	404*
A910 [F335]	2.16	19		4th c.	402*
A911 [F324]	1.57	18		4th c.	395*
A912 [F323]	1.30	16		4th c.	395*
A913 [F304]	2.01	18		4th c.	395*
A914 [F97]	1.72	14		4th c.	728*
A915 [F1952]	0.79	13		4th c.?	1462
A916 [F1949]	0.78	12		4th c.?	1391*

SARAÇHANE COIN CATALOGUE

No.	Metal [Æ] Wt. [gm]	Size	Denom.	Date	Prove- nance
A917 [F1775]	0.96	19		4th c.?	1278
A918 [F673]	2.47	17		4th c.?	503*
A919 [F503]	1.58	15		4th c.?	564*
A920 [F98]	1.21	13		4th C.?	728*
A921 [F671]	0.53	6	Nummus?	5th c.	569*
A922 [F665]	0.41	9	Nummus?	5th c.	566*
A923 [F557]	0.88	11	Nummus?	5th c.	647*
A924 [F478]	0.35	7	Nummus?	5th c.	564*
A925 [F537]	0.73	9	Nummus?	5th c.?	647*
A926 [F545]	0.90	10	Nummus?	5th c.?	647*
A927 [F1849]	0.15	5	Nummus?	5th c.?	686*
A928 [F1848]	0.55	7	Nummus?	5th c.?	686*
A929 [F1841]	0.19	8	Nummus?	5th c.?	686*
A930 [F1840]	0.18	6	Nummus?	5th c.?	686*
A931 [F1684]	1.18	11	Nummus?	5th c.?	1299*
A932 [F1082]	0.71	9	Nummus?	5th c.?	1330*
A933 [F688]	0.95	11	Nummus?	5th c.?	1059
A934 [F589]	0.83	11	Nummus?	5th c.?	562*
A935 [F449]	0.38	8	Nummus?	5th c.?	560*
A936 [F336]	0.41	9	Nummus?	5th c.?	404*
A937 [F256]	0.45	9	Nummus?	5th-6th c.?	593*

THE CATALOGUES

No.	Metal [Æ] Wt. [gm]	Size	Denom.	Date	Prove- nance
A938 [F1649]	2.16	12	5 n.	Justin I (518-27)?	1330*
A939 [F838]	0.78	12	5 n.	Justin I (518-27)?	962*
A940 [F682]	2.31	12	5 n.	Justin I (518-27)?	569*
A941 [F676]	1.95	13	5 n.	Justin I (518-27)?	569*
A942 [F648]	3.48	29	Follis	6th c.	564*
A943 [F1018]	5.59	20	20 n.	6th c.	1219*
A944 [F436]	3.33	16	10 n.	6th c.	246
A945 [F513]	3.26	14	10 n.	6th c.	634*
A946 [F835]	1.15	17	10 n.	6th c.	1292
A947 [F837]	2.28	19	10 n.	6th c.	1292
A948 [F1065]	2.49	20	10 n.	6th c.	1242*
A949 [F1372]	1.79	21	10 n.	6th c.	1215*
A950 [F1418]	0.56	13	10 n.	6th c.	1218*
A951 [F1435]	1.73	15	10 n.?	6th c.	1250*
A952 [F1410]	1.69	12	10 n.?	6th c.	1250*
A953 [F491]	1.66	12	5 n.	6th c.	564*
A954 [F480]	0.40	12	5 n.	6th c.	564*
A955 [F251]	0.54	24	5 n.	6th c.	822*
A956 [F272]	1.29	12	5 n.	6th c.	371*
A957 [F394]	1.36	11	5 n.	6th c.	559*
A958 [F447]	0.85	16	5 n.	6th c.	563*

SARAÇHANE COIN CATALOGUE

No.	Metal [Æ] Wt. [gm]	Size	Denom.	Date	Prove- nance
A959 [F475]	1.44	13	5 n.	6th c.	564*
A960 [F535]	0.49	13	5 n.	6th c.	647*
A961 [F543]	1.50	13	5 n.	6th c.	647*
A962 [F547]	1.61	13	5 n.	6th c.	647*
A963 [F548]	2.15	14	5 n.	6th c.	647*
A964 [F553]	2.05	12	5 n.	6th c.	647*
A965 [F556]	1.21	13	5 n.	6th c.	647*
A966 [F575]	1.48	13	5 n.	6th c.	566*
A967 [F591]	0.60	10	5 n.	6th c.	590*
A968 [F595]	1.56	12	5 n.	6th c.	566*
A969 [F606]	1.66	19	5 n.	6th c.	559*
A970 [F609]	1.82	12	5 n.	6th c.	563*
A971 [F650]	1.19	12	5 n.	6th c.	578
A972 [F920]	1.98	13	5 n.	6th c.	1058
A973 [F1077]	2.20	15	5 n.	6th c.	1242*
A974 [F1094]	1.42	13	5 n.	6th c.	1246*
A975 [F1211]	1.94	14	5 n.	6th c.	1221*
A976 [F1214]	1.12	13	5 n.	6th c.	1221*
A977 [F1216]	1.00	15	5 n.	6th c.	1221*
A978 [F1483]	1.87	12	5 n.	6th c.	1261*
A979 [F1486]	0.90	15	5 n.	6th c.	1261*

THE CATALOGUES

No.	Metal [Æ] Wt. [gm]	Size	Denom.	Date	Prove- nance
A980 [F1757]	1.48	16	5 n.	6th c.	1274
A981 [F1834]	0.98	15	5 n.	6th c.	1035*
A982 [F604]	1.25	20	5 n.	6th c.	564*
A983 [F1074]	0.63	15	5 n.	6th c.	1242*
A984 [F1024]	1.60	14	5 n.?	6th c.	1222*
A985 [F440]	1.24	13	5 n.?	6th c.	563*
A986 [F1219]	1.46	15	5 n.?	6th c.	1221*
A987 [F1284]	1.07	16	5 n.?	6th c.	1213*
A988 [F1325]	0.46	13	5 n.?	6th c.	1214*
A989 [F1413]	1.29	10	5 n.?	6th c.	1218*
A990 [F1442]	1.29	12	5 n.?	6th c.	1215*
A991 [F1484]	1.70	18	—	6th c.	1261*
A992 [F1835]	1.98	23	—	6th c.	1035*
A993 [F1858]	1.64	30	—	6th c.	686*
A994 [F1368]	0.84	10	—	6th c.	1215*
A995 [F584]	1.88	19	—	6th c.	563*
A996 [F540]	3.80	19	—	6th c.	647*
A997 [F431]	2.64	16	—	6th c.	564*
A998 [F1960]	2.70	27	Follis	6th c.?	411
A999 [F1689]	3.42	23	20 n.	6th c.?	1323*
A1000 [F1750]	1.14	19	5 n.	6th c.?	1274

SARAÇHANE COIN CATALOGUE

No.	Metal [Æ] Wt. [gm]	Size	Denom.	Date	Prove- nance
A1001 [F402]	1.08	13	-	6th c.?	559*
A1002 [F1494]	2.18	16	20 n.	6th-7th c.	Unrecorded
A1003 [F1154]	2.45	27	20 n.	6th-7th c.?	1246*
A1004 [F1152]	1.52	20	20 n.	6th-7th c.?	1223*
A1005 [F310]	1.77	33	Follis	Phocas (603-10)	392
A1006 [F1396]	1.81	21	Follis	7th c.	1257*
A1007 [F1114]	3.67	23	Follis	7th c.	1245*
A1008 [F1102]	1.81	20	Follis	7th c.	1223*
A1009 [F1111]	2.64	22	20 n.	7th c.	1246*
A1010 [F1101]	2.07	22	-	7th c.	1249*
A1011 [F1193]	2.01	24	-	7th c.	1221*
A1012 [F1027]	2.10	23	Follis	7th c.?	1222*
A1013 [F1723]	1.39	23	Follis	7th c.?	1272*
A1014 [F1713]	1.61	22	Follis?	7th c.?	1275
A1015 [F1115]	1.78	19	20 n.	7th c.?	1245*
A1016 [F544]	1.68	18	5 n.	Heraclius (610-41)?	647*
A1017 [F1139]	1.45	17	Follis	Constans II (641-68)?	1223*
A1018 [F185]	2.17	24	5 n.	7th c.?	704*
A1019 [F930]	2.06	22	-	7th c.?	1323*
A1020 [F1776]	1.40	17	-	7th c.?	1278
A1021 [F1131]	2.66	24	Follis	8th-9th c.	1246*

THE CATALOGUES

No.	Metal [Æ] Wt. [gm]	Size	Denom.	Date	Prove- nance
A1022 [F1329]	3.61	24	Follis	8th-9th c.	1214*
A1023 [F1066]	2.02	17	Follis	8th c.	1242*
A1024 [F1422]	2.99	20	Follis	8th c.	1259*
A1025 [F1601]	1.46	18	Follis	8th c.	1288
A1026 [F987]	1.36	16	20 n.	Leo III (717-41)	1219*
A1027 [F1290]	0.69	15	-	8th c.	1252*
A1028 [F1729]	2.59	19	Follis	8th c.?	1272*
A1029 [F287]	0.62	17	-	8th c.?	544
A1030 [F1384]	1.97	22	Follis	9th c.	1256*
A1031 [F1414]	2.66	20	Follis	9th c.	1260*
A1032 [F1487]	4.10	22	Follis	9th c.	1261*
A1033 [F1490]	4.71	22	Follis	9th c.	1262*
A1034 [F1722]	5.48	25	Follis	9th c.	1272*
A1035 [F1735]	4.09	25	Follis	9th-10th c.?	1272*
A1036 [F1318]	0.76	18	Follis	9th-10th c.?	1215*
A1037 [F1643]	6.23	27	Follis	10th c.	1272*
A1038 [F1735]	1.56	23	Follis	10th c.	1272*
A1039 [F1707]	1.83	21	-	10th c.	1272*
A1040 [F1702]	3.10	23	-	10th c.?	1181*
A1041 [F1656]	1.16	20	-	10th c.?	1371*
A1042 [F405]	1.58	23	-	13th c.?	1081*

SARAÇHANE COIN CATALOGUE

Ottoman coins

The following identifications were kindly provided by Mr. Ibrahim Artuk of the Istanbul Archaeological Museum.

No.	Metal [Æ] ¹ Wt. [gm]	Size	Sultan	Denom.	Mint	Year	Prove- nance
A1043 [F22]	3.08	17	Beyazid II 886-918 (1481-1512)	-	Constantinople		143
A1044 [F262]	0.52 Æ	12	Süleyman I 926-74 (1520-66)	-	Novar		367
A1045 [F39]	3.01	21	Süleyman I 926-74 (1520-66)	-	Egypt	93?	178
A1046 [F21]	1.16	14	Süleyman I 926-74 (1520-66)	-	Constantinople	942	143
A1047 [F68]	1.45	19	Süleyman II 1099-1102 (1687-91)	-	Constantinople	1099	356
A1048 [F106]	0.91	19	Süleyman II 1099-1102 (1687-91)	-	Constantinople	1099	729
A1049 [F500]	0.51 Æ	15	Mahmud I 1143-68 (1730-54)	-	Constantinople	1143	1059
A1050 [F735]	4.81	27	Abdülmeçid 1255-77 (1839-61)	10 para	Constantinople	1255	484
A1051 [F25]	5.14	27	Abdülaziz 1277-1293 (1861-76)	10 para	Constantinople	1277	132
A1052 [F92]	5.86 Nickel	24	Sultan Reşad 1327-1336 (1909-18)	40 para	Constantinople	1327	1
A1053 [F328]	2.58 Nickel	18	Sultan Reşad 1327-1336 (1909-18)	10 para	Constantinople	1327	249

¹Metallic content is Æ unless otherwise indicated.

In addition, surface finds included an Austrian 5-kreutzer piece dated 1807 and a Russian 3-kopek piece dated 1899; fragments of two Nuremburg tokens were also found, in levels 1272 and 1455.

Chapter Thirteen

THE HUMAN BONES

D. BROTHWELL

THE MATERIAL presented here was studied on site during the later stages of the Saraçhane project. Attendance on site while the material was being excavated was not possible. The state of preservation of bone and the common occurrence of smaller bones from adult skeletons shows that retrieval was good. The scarcity of infant skeletal remains, however, does suggest some form of social or burial differential working against their survival and recovery. Generally, the report shows much fragmentation and mixing of bones *in situ*, facts not conducive to the collection of fairly complete runs of data.

The report concentrates on providing a range of basic biological details of the Saraçhane population, although the material is fragmentary and incomplete. Interpopulation comparisons were difficult, not only because of the incomplete nature of much of the Saraçhane data, but also because there is little with which this data could be usefully compared.

The series comprises between two hundred and three hundred people, with males and females about equally represented. Although fragmentation and the incompleteness of the skeletons make determination of ages difficult, it seems likely that the average adult life-expectancy was in the region of twenty-eight to twenty-nine years, which is relatively low. The detailed study of the sample provided a variety of data on the Byzan-

tine population of Istanbul. This was of medium stature (ca. 168 cm for males, similar to modern Turkish males), but the cephalic index was still pre-brachycephalic in form. As regards nonmetrical traits, the Saraçhane group appears, on the evidence of a low mandibular torus frequency and a noticeably high palatine torus rate, to be distinctive in comparison with other archaeological series.

There was much evidence of pathology, and, in view of the fairly small sample, one might conclude that health problems were common, linked especially to trauma, diet, age-related degenerative conditions, and infections. Trauma evidence suggests that, besides some accidental fractures, other injuries might reflect violence within the community, although whether of inter- or intragroup origin is not known.

Benign tumours (neoplasms) were well in evidence, but no certain malignancies occurred (although no. 111, below, is a possibility). The vertebral evidence for tuberculosis is impressive, and it seems unlikely that alternative diagnoses would explain satisfactorily this pathology. The occurrence of three examples of bone tuberculosis probably indicates that the disease was in fact far more prevalent in the community, for the most part affecting soft tissues only. Finally, there is one possible case of poliomyelitis, evidence of which is surprisingly uncommon in the past.

Check-list of Cranial Material

THE FOLLOWING details provide a brief summary of the cranial material, complete or highly fragmentary, which was studied. Further details of osteometry, pathology, and so forth will be found in other sections of the report. For the context of the following burials, the reader is referred to the account of their excavation in chapter 2 above and to fig. H in that chapter.

1. Four individuals; fragmentary; including one adult and one child of about 3 years.
2. Probably six individuals; at least ten parietals; children, one of whom is $5 \pm \frac{1}{2}$ years.
3. One individual; broken but well-preserved; male aged 25 ± 4 years.

4. Two individuals; one well preserved, child aged $7 \pm \frac{1}{2}$ years; the other with good cranium, asymmetry, child aged about 7 years.
5. One individual; fragmentary; child probably aged under 3 years.
8. Several individuals; poor condition; one female aged 22 ± 1 year, another female.
9. One individual; incomplete; adult male.
10. One individual; poor condition; child aged about 2 years.
11. One individual; very incomplete; adult male.
- 12 or 13. One individual; broken; female aged possibly 45 ± 5 years.
15. One individual; incomplete; female aged 26 ± 3 years.
16. One individual; good state of preservation, but broken; child aged $8 \pm \frac{1}{2}$ years.
19. One individual; incomplete; child aged about $5 \pm \frac{1}{2}$ years.
20. One individual; broken; adult aged 30 ± 3 years.
21. One individual; almost complete; male aged 23 ± 2 years.
22. Several individuals; fragmentary, including mandibular fragments; including females aged about 21 years and 33 ± 5 years, and male aged about 35 ± 5 years.
24. One individual; fragmentary; child.
26. One individual; broken; child aged 9 ± 1 years.
27. One individual; very fragmentary; female aged 21 ± 2 years.
29. One individual; very incomplete; child aged about 2 years.
- 29-32. Several individuals; very broken; including child aged 15 ± 1 years.
33. One individual; incomplete; child aged about 3 years.
34. Several individuals; including male aged 22 ± 1 years and child of about 8 years.
35. One individual; broken and eroded; child aged about 5 years.
36. One individual; broken, rather 'dense' diploic tissue; female aged 30 ± 5 years (part of a second individual is represented by a mandible of an adult aged 40+ years).
37. One individual; fragmentary, variable preservation; female aged 19 ± 1 years.
- 42 or 48. Two individuals; fragmentary; adult female and child.
47. One individual; very broken; male aged 30 ± 5 years.
48. Several individuals; fragmentary; including one male and one female, one adult aged 24 ± 2 years.
51. One individual; broken and eroded; child aged about 4 years.
52. One individual; incomplete and crushed; male aged about 35 ± 5 years.
54. Many individuals: post mortem deformity, adult, possibly male; incomplete, male probably aged over 25 years; only cranial vault, female aged 50+ years; incomplete, adult female (?); only cranial vault, adult female; adult male; seven fragmentary mandibular fragments (one male, two aged 26 ± 3 years and $8 \pm \frac{1}{2}$ years) and in addition mandibles from the following: four adults, aged 25 years, 26 years, 28 ± 3 years, 32 ± 3 years, 40 ± 5 years; three adult females, two females aged 34 ± 5 years; one adult male, one adult (?) male, one male aged 26 ± 3 years, one aged 29 ± 3 years, one (?) male aged over 45; a child aged $1\frac{1}{2}$ years, and one ?under 6 years; also 21 maxillary fragments.
56. Many individuals; occipital fragments, three probably adults, one child; cranial fragments, three adults and child aged 4 years, plus incomplete material from adult male possibly over 40 years; many skull fragments that are pieces of jaw, two mandibles, and a maxilla from children; parts of ten maxillae, five immature of uncertain age, one 16 ± 1 years, one adult 40 ± 5 years; parts of eleven mandibles, five children, one of which 17 ± 1 years and one $4 \pm \frac{1}{2}$ years, one likely to be from a female aged 22 ± 2 years.
60. Two individuals; fragments of skull; adult male and child aged 13 ± 1 years.

- 62.** One individual; broken with some erosion; adult female.
- 63.** One individual; incomplete skull; adult aged 28 ± 4 years.
- 66.** One individual; almost complete skull; child aged 10 ± 1 years.
- 69.** Many individuals; fragments of skull; individual aged 17 ± 1 years, another $10 \pm \frac{1}{2}$ years.
- 72.** One individual; broken and incomplete skull; child aged 8 ± 1 years.
- 74.** One individual; almost complete skull; teenager.
- 77.** One individual; incomplete; child aged 9 ± 1 years.
- 79.** One individual; almost complete mandible; adult female of ?early middle age.
- 81, 82, 84.** Several individuals; broken and partial; including female? aged 21 ± 2 years, child aged about 5 years.
- 83.** One individual; poorly preserved skull; female aged 26 ± 3 years.
- 97.** Many individuals; well-preserved but broken skull, adult ?male of ?early middle age; well-preserved, female adult; calvarium, adult male; reasonably preserved skull, male; fragments of seventeen mandibles, including male aged 37 ± 5 years, individuals aged 17 ± 2 years, 35 ± 5 years, 25 ± 2 years, 36 ± 5 years, 15 ± 1 years, 30 ± 3 years, 26 ± 3 years, and 18 ± 1 years, possibly one newborn; eleven maxillary fragments.
- 98.** Several individuals; incomplete skulls; including female aged over 25 years, individual aged 26 ± 3 years, child approximately 8 years; four maxillary fragments, including individual aged 19 ± 2 years; two mandibles, one from an individual approximately 20 years.
- 99.** One individual; broken skull, mandible fairly complete; male aged ? 35 ± 5 years.
- 103.** One individual; complete; child aged about 1 year.
- 105.** One individual; fragmentary with surface erosion; ?female aged 25 ± 3 years.
- 106.** Several individuals; fragmentary; three children, one aged about 4 years, one aged about 13 years, also male about 24 ± 2 years.
- 107.** One individual; fragmentary; adult male.
- 109.** Several individuals; fragmentary mandibles, three adults, two aged 20 ± 1 years, one aged 21 ± 1 years; three maxillae.
- 110.** Several individuals; broken skull fragments and three mandibles; including individuals aged 32 ± 4 years, 35 ± 5 years, 12 ± 1 years, and an immature individual.
- 111.** Many individuals; mixed and broken cranial bones, including mandibles and maxillae; including individuals aged $4 \pm \frac{1}{2}$ years, 8 ± 1 , male aged 35 ± 5 , two adults aged 26 ± 3 years, one aged 27 ± 3 , one aged 30 ± 5 , six aged 33 ± 5 , one aged 45+ years.
- 112.** Many individuals; mostly incomplete and fragmentary but does include some complete, well-preserved skulls, cranial fragments, mandibular fragments, facial fragments (palates and mandibles); including individuals aged 8 ± 1 years, male aged 21 years, child under 7 years, female aged about 23 ± 2 years.
- 113.** Many individuals; broken, eroded and incomplete skulls; including child aged under 4 years, adult aged 23 ± 2 years, four adults, adult female.
- 115.** One individual; good condition; child aged about 6 years.
- 116.** One individual; fragmentary; child aged about 9 months.
- 117.** One individual; skull minus upper face; robust ?middle-aged male.
- 118.** One individual; broken cranium; ?female aged about 21 ± 2 years.
- 119.** One individual; good condition; child aged about 4 years.
- 120.** One individual; good condition; child aged about $5 \pm \frac{1}{2}$ years.
- 122.** One individual; broken but good bone condition; probably male aged 29 ± 3 years.
- 123.** Probably four individuals; pieces of skull and parts of six mandibles and two maxillae; all adults including individuals aged 24 ± 2 years, 35 ± 5 years, and 32 ± 3 years.
- 124.** Several individuals; part of a left temporal bone

and five fragments of mandible; including female aged 32 ± 5 years and individual aged 18 ± 1 years.

125. Several individuals; parts of two maxillae, adults aged 21 ± 1 years and 24 ± 2 years; parts of 4 mandibles, males aged 26 ± 3 years and 34 ± 5 years, female aged 25 ± 2 years and a child aged 6 ± 1 years; edentulous skull, robust, probably elderly male.

127. Several individuals; fragmentary; at least two individuals ?female adults, one 35 ± 5 years.

128. Many individuals; partial, incomplete skulls, including adults aged 29 ± 3 years, 31 ± 4 years, and two others; children aged 3 years, 8 years, and 15 years; broken mandibles, including one from child aged 15 years, males aged 25 ± 2 years, 26 ± 3 years, and 35 ± 5 years, two from individuals aged 31 ± 3 years and one from an individual aged 29 ± 3 years.

133. One individual; broken skull with no face; adult male.

134. One individual; broken skull; probably adult female.

135. Several individuals; parts of two skulls.

136. Several individuals; parts of two skulls; one adult, one individual aged 8 ± 1 years old.

137. Several individuals; fragments of skull; at least one immature individual.

139. Several individuals; parts of four skulls, mainly mandibles; all are immature, one is aged 4 years.

140. One individual; fragmented skull; ?male aged 16 ± 1 years.

141. Several individuals; cranial material and second palate; adults, including adult male.

142. One individual; female aged perhaps more than 45 years.

143. One individual; relatively well-preserved skull; male aged approximately 33 ± 5 years.

If one attempts to evaluate total numbers of individuals from these fragments, then more than three hundred individuals seem likely to be represented. However, in view of the considerable fragmentation, and the possibility that more than one sample of skull could belong to the same individual, there seems a case for reducing this estimated total.

CHECK-LIST OF POST-CRANIAL MATERIAL

1. Parts of at least 4 individuals. Remains of 6 femora and 5 tibiae.

5. Scapula, ribs, fibula, vertebrae, and pelvis.

8. Poorly preserved material of at least 2 individuals. The post-cranial bones identified are: 2 humeri, a femur, 3 fibulae, a pelvic fragment, and a tibia.

***8.** Broken, fragmentary, and in a poor condition. Female? Post-cranial remains include 2 tibiae, 2 femora, a humerus, a scapula, and parts of two innominates (one being immature).

14. Fragmentary material consisting of pieces of ribs, pelvis, both patellae, ulna, radius, humerus, both tibiae, femur, and 29 hand/foot bones.

19. Very broken and incomplete bones, mainly from the lower half of the body. They include 42 foot bones, 2 tibiae, 2 femora, 2 patellae, a fibula, and pelvic remains.

20. Pieces of pelvis, scapula, femur, fibula, tibia, 16 bones of the foot, ribs, clavicle, and 7 vertebrae.

22. Possibly two females are represented, both adults. The remains include a pelvis, a sacrum, 4 humeri, 2 tibiae, 2 femora, 3 radii, 2 ulnae, a fibula, 2 clavicles, 34 hand/foot bones, 18 vertebrae, 2 patellae and 2 scapulae.

Parts of at least two individuals. Remains are 5 large fragments of pelvis, 2 femora, pieces of sacrum, radius, sternum, numerous rib fragments, about 10 vertebrae, and 20 bones of the hand.

54. The minimum estimates of the post-cranial bones represented by the very broken and incomplete remains may be listed as follows: 46 humeri, 27 ulnae (including a child), 33 radii, 47 femora, 32 tibiae, 14 fibulae, 4 sacra (one with a green metal stain) and 283 other vertebrae (a number from children), parts of 21 innominates, 23 scapulae (1 child), 26 clavicles, over 100 rib fragments, 23 patellae, and 423 hand/foot bones.

55. A mixed assemblage of skeletal material, with quite a few bones of children. In all, and excluding many smaller pieces, there are parts of 10 humeri, 8 ulnae, 6 radii, 2 femora, 12 tibiae, 15 fibulae, 1 sacrum and 175 other vertebrae, 20 innominates, 2 sterna, 6 scapulae, 7 clavicles, fragments of various ribs, 39 patellae, and 1,076 hand/foot bones. The sample is clearly notable

for the large numbers of smaller bones of the skeleton, from the hands, feet, vertebral column, and knee.

56. Excluding the many very small fragments, the bones represented are mainly long bones, vertebrae, and bones of the hands and feet. They consist of the following: 23 humeri, 17 ulnae, 13 radii, 23 femora, 20 tibiae, 9 fibulae, 3 sacra and 102 other vertebrae, 10 innominates, 2 sterna, 6 scapulae, 9 clavicles, 5 patellae, various rib pieces, 78 hand/foot bones.

Very broken fragments of a number of individuals. The post-cranials comprise: ribs, 3 tibiae, 8 femora, 4 humeri, 4 innominates, 1 patella, 4 radii, 5 ulnae, 3 fibulae, 19 hand/foot bones, 2 scapulae, and 32 vertebrae.

69. Very broken and eroded material. Parts of at least 20 vertebrae, 2 ulnae, 1 humerus, 3 radii, 3 tibiae, 3 femora, 1 patella, 2 innominates, and 13 hand/foot bones. Considering age and sex differences, there are at least 6 people represented.

76. Extremely fragmented remains of at least 4 radii, 2 tibiae, 4 femora, 3 ulnae, 1 pelvis, 3 fibulae, 1 sternum, 1 patella, 1 sacrum and 11 other vertebrae, 2 skulls, 3 humeri, 2 clavicles and 2 scapulae. The bones may represent a robust male and a slender female.

97. This consists of 12 trays of mixed remains, including at least 1 child. The bones are: 43 humeri, 36 ulnae, 26 radii, 81 femora, 33 tibiae, 13 fibulae, 13 sacra and 306 other vertebrae, parts of 31 innominates, 18 scapulae, 11 clavicles, 17 patellae, and 403 hand/foot bones.

98. Parts of at least 6 individuals, comprising the remains of at least 33 long bones.

Very broken and incomplete remains of at least three children and one adult. The mature bones include a skull, a femur, a humerus, pelvis, 4 vertebrae, a patella, and 5 foot bones. The immature bones include 1 pelvic fragment, ribs, a scapula, and a vertebra.

Broken remains of at least 3 innominates, 12 vertebrae, 5 foot bones, 2 radii, 1 ulna, 4 humeri, 6 tibiae, 1 clavicle, 1 patella, 1 scapula, and 6 femora.

109. Parts of 8 humeri, 2 ulnae, 5 radii, 17 femora, 4 tibiae, 1 fibula, 20 vertebrae (and 2 sacra), parts of 2 pelves, 4 scapulae, 3 clavicles, 1 patella, fragments of ribs, and 4 hand/foot bones.

110. Mainly very broken pieces. These include parts of 8 vertebrae, 4 humeri, 1 radius, 2 ulnae, and a clavicle. This sample mainly consists of broken skulls, but the post-cranials include ribs, a radius, 2 ulnae, a tibia, 2 femora, 2 humeri, 2 scapulae, and a vertebra.

111. There are 6 trays of mixed skeletal material. The bones include 25 humeri (3 immature), 23 ulnae (3 immature), 27 radii (3 immature), 28 femora (10 immature), 19 tibiae, 9 fibulae, 6 sacra and 160 other vertebrae, 14 innominates, 23 scapulae, 13 clavicles, 9 patellae, and 267 hand/foot bones.

Excluding many small fragments, the bones identified were 18 humeri, 13 ulnae, 11 radii, 14 femora, 5 tibiae, 1 sacrum and 96 vertebrae, 11 innominates, 3 sterna, 8 scapulae, 7 clavicles, 4 patellae, and 68 hand/foot bones.

112. On the evidence of skulls, at least 15 individuals are represented in this sample, two being immature. The larger post-cranial fragments consist of 18 vertebrae and a sacrum, 4 innominates, a scapula, ribs, 2 clavicles, 4 femora, and 2 humeri.

Parts of at least 5 adults and one child. The post-cranial remains consist of pieces of pelvis, a sacrum, ribs, 5 vertebrae, 2 femora, 2 humeri, a radius, a tibia, and a metatarsal.

Mainly long bones, with a few ribs and pelvic fragments. Numerically, there are 2 fibulae, 18 tibiae, 6 humeri, an ulna, 14 femora, 3 sacra and 5 other vertebrae, and a calcaneum.

113. Parts of 2 tibiae, a femur, an ulna, pieces of 2 innominates, 2 scapulae, 3 vertebrae, and a rib.

Parts of at least four individuals. There are parts of 2 ulnae, 1 radius, 3 humeri, 3 scapulae, 3 tibiae, 3 clavicles, 1 fibula, 2 innominates, a sacrum and 7 other vertebrae, 8 femora, and 3 foot bones.

Broken and fragmentary. Remains of at least 7 femora, 3 tibiae, 3 innominates, 4 radii, 1 patella, 2 ulnae, 5 humeri (including a child humerus with green stains distally), 4 fibulae, 1 scapula, 1 sternum, 3 clavicles, a sacrum and 12 other vertebrae, and 5 foot bones.

Parts of at least 3 humeri, 3 innominates, 2 clavicles, 7 tibiae, 5 femora, 1 sternum, 5 foot bones, a sacrum, and 18 other vertebrae.

123. Excluding the many small fragments, it was possible to identify 8 humeri, 7 ulnae, 6 radii, 9 femora, 4 tibiae, 6 fibulae, 50 vertebrae (and 2 sacra), 4 pieces of pelvis, 2 sterna, 4 scapulae, 4 clavicles, ribs, 2 patellae and 18 hand/foot bones.

124. Fragments of a number of skeletons. Parts of 4 humeri (1 immature), 2 radii, a tibia, 3 ulnae (1 immature), 2 pelvic fragments (1 immature), 2 immature scapulae, numerous ribs, 16 vertebrae and four hand bones.

The large fragments in this sample comprise 14 hu-

meri, 10 ulnae, 10 radii, 27 femora, 15 tibiae, 9 fibulae, 4 sacra and 54 other vertebrae, 22 innominates, 2 sterna, 4 scapulae, 3 clavicles, 11 patellae, 39 hand/foot bones.

125. Parts of 8 humeri, 8 ulnae, 5 radii, 6 femora, 3 tibiae, 4 fibulae, 1 sacrum and 41 other vertebrae, 4 innominates, 3 sterna, 2 scapulae, 4 clavicles, 2 patellae and 28 hand/foot bones. There are also many small fragments.

128. Fragmentary remains, including 2 fibulae, 6 humeri, 2 radii, 2 ulnae, 5 femora, 3 tibiae, an innominate, a scapula, 2 sacra and 4 other vertebrae, and 11 hand/foot bones.

Remains of at least 10 vertebrae, a sacrum, 2 scapulae, 2 ulnae, 3 radii, 2 femora, 2 innominates, a clavicle, 4 humeri, a fibula, 5 tibiae, and 5 foot bones.

A number of post-cranial bones, all incomplete. 3 vertebral bodies, parts of 4 femora, parts of 2 humeri, a tibia, an ulna, and a pelvis.

Parts of a number of skeletons, which are mixed and all far from complete. The post-cranial remains comprise 2 tibiae, an ulna, a radius, 4 humeri, 3 femora, a scapula, a pelvis, 2 patellae, a talus, 3 vertebrae, and a scapula.

Parts of 6 femora, 2 innominates, 4 ulnae, 2 radii, 7 humeri, ribs, a scapula, 3 tibiae, 3 foot bones, and 5 vertebrae.

Parts of at least 3 innominates, ribs, 2 ulnae, 3 tibiae, 4 humeri, an ulna, 2 patellae, 2 clavicles, a scapula, 3 femora, 16 hand/foot bones, 1 sacrum and 7 other vertebrae.

Parts of at least 5 individuals. There are fragments of fibulae, tibiae, femora, humeri, and ulnae from a child. An older child is represented by a pair of more developed femora. Probably another immature individual is represented by further tibiae, fibulae, foot bones, scapula, vertebrae, and ribs. Adult bones include parts of 3 femora, 3 tibiae, a humerus, vertebrae and a calcaneum.

Remains of at least 4 adults, comprising a sacrum, 2 fibulae, 3 tibiae, a radius, an ulna, 3 humeri and 4 femora.

132. Fragmented and eroded pieces of at least 2 individuals, as represented by 4 tibiae, 2 fibulae, and 3 femora.

134. Very incomplete material representing 2 individuals (one adult female and a child). The adult post-cranials are 2 femora, 1 scapula, 1 ulna, 2 fibulae, 2 humeri

and 2 bones of a foot. The immature person is represented by 2 femora, 2 tibiae, and an ulna.

135. Small fragments of a pelvis, 3 long bones, a scapula, ribs, vertebra, and sternum.

137. Parts of 5 femora, 1 sacrum, 1 lumbar, 1 sternum, 4 tibiae and 1 humerus. At least one immature individual present.

138. Only a few post-cranial fragments, consisting of 4 femora (2 children), 1 ulna, 3 humeri (1 child), a rib, 11 hand/foot bones.

139. Parts of a number of individuals are represented by 3 radii, 3 ulnae, 3 fibulae, 5 femora, 2 pelves, 2 patellae, 2 scapulae, 4 humeri, 6 clavicles, 26 vertebrae, and 23 hand/foot bones.

SUMMARY OF THE POST-CRANIAL REMAINS

It will be seen from the listing above that there is a rather uneven representation of post-cranial bones from the site in the 237 trays of bones studied, with some parts of the skeleton not being as well represented as others. This is summarised in Table 1.

It can be seen from Table 1 that in the 6,291 better identified pieces of bone, some bones are far better represented than others, and it is significant that the stronger bones are probably best represented (relative to the minimal 'minimum number of individuals' estimated for each bone type). This post-cranial evidence supports that of the skull, where the number of frontal bones available for study amounted to at least 186. Clearly, it is likely that well over 200 individuals are represented in this combined sample.

AGE COMPOSITION AND LIFE EXPECTANCY (pre-Turkish sample)

In view of the fragmentary and mixed nature of much of the skeletal material, there were considerable problems in ageing individuals. Very few pubic symphyses remained, and, for the adults, dental attrition had to be used to a large extent. In using tooth wear, there was a need to take into account the fact that molar wear did not seem to be so severe, relative to age, as early Egyptian and Iron Age Lachish material I have previously examined. A further problem has been that the sexing of such incomplete material was often not possible with any degree of confidence, and thus quite

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Table 1. Frequency of Occurrence of Bones at
Saraçhane

Bone Group	Number Identified	Minimal MNI ¹
Humerus	297	149
Ulna	192	96
Radius	181	91
Femur	390	195
Tibia	247	124
Fibula	115	58
Sacrum	54	54
Vertebrae (others) ²	1553	65
Innomates	190	95
Sternum	20	20
Scapula	131	66
Clavicle	113	57
Patella	129	65
Hand/foot	2679	26
Total	6291	

¹A crude estimate of numbers of individuals possible, based on the numbers of a particular bone group in a skeleton (i.e. age and sex are excluded here)

²Excluding the coccyx and sacrum

a number of adult age estimates could not be related to one or other sex. In placing individuals into age categories, or in estimating life expectancy for a group, the middle value within the age estimate range (usually \pm 5 yrs.) has been used. It should be noted that, as there are many jaw fragments, only the right side of mandibles have been used in this case. The Saraçhane ages, in relation to age groups, are given in Table 2:

Compared with age at death in underdeveloped communities today, the Saraçhane results are clearly anomalous when it comes to the "under 1 year" category. The deaths in this category are very underrepresented, and this presumably results from differential preservation in the bones of younger children and possibly also the failure of newborns and young infants to be buried in the same place as older individuals. In terms of overall life expectancy, it is clearly not possible to include children in the calculations, in view of this distortion. In the case of individuals of adult age, those judged to be male (21 individuals) had an average life expectancy of 29 years, while females (17 individuals) had an ex-

pected lower figure of 26 years. These figures were higher than expected, and it seemed possible that the sample sizes may have influenced the high averages. However, if the male and female data are pooled with the adult age estimates for individuals whose sex is unknown, then the life expectancy is still 28 years (for 76 individuals).

SEX RATIO

Sexing was attempted with various degrees of confidence (depending on the degree of completeness of the material). Because of the fragmentary nature of the bones, considerable difficulties were encountered in avoiding duplication of sexing. In the end, sexing was mainly taken from the evidence of cranial material. Of the 128 cases where the sex of the individual was tentatively established, just over half (66) were males. The difference of 4 between males and females is quite insignificant, and the results can be taken to indicate that there was full representation of both sexes in the cemetery.

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Table 2. Age-Group Composition of Pre-Turkish Individuals (in years)

Sex	Under 1	1-4	5-9	10-19	20-29	30-39	40-49	50+
M or F	2	14	20	14	20	14	2	1
M					12	8	1	
F					11	6		
Total	2	14	20	14	43	28	3	1

CRANIAL MEASUREMENTS AND VARIATION

It is regrettable that very few skulls were to any extent complete, and therefore only partial series of measurements were available for each specimen. This has made any form of detailed analysis rather difficult. In the case of the specimens where quite a number of dimensions could be taken, they have been assembled as Table 3. There are also a number of skull fragments where only one or two measurements could be taken. As the adults and children could be determined in the majority of cases—even though fragmentary—I have briefly listed the adult dimensions below. Only those cases are listed where some tentative assessment of sex could also be indicated. In the following listing of the measurements, the specimen number is followed by the dimension in millimetres, after which is the biometric symbol in parentheses (showing which measurement).

11. Male. 95 (B¹); 101 (S3); 41.3 (O¹); 33.1 (O2).

12 I.f. 13. Female. 96 (B¹).

15. Female. 42.6 (G¹); 24.8 (NB); 41.9 (ZZ); 30.0 (RB).

20. Male. 179 (L); 132 (S1); 124 (S2); 111 (S3).

27. Female. 34.6 (RB).

37. Female? 101? (B¹); 121 (S1); 9.8 (SC).

47. Skel. B. Male. 45.8 (ZZ); 32.7 (H1).

54. Male? 190 (L); 124 (S1); 131 (S2).

Mandible (a1). Male? 44.2 (ZZ); 31.8 (RB).

Mandible (a2). Female? 32.0 (RB).

Mandible (u). Male? 36.7 (RB).

Maxilla (xii). Male? 27.5 (NB).

Mandible (w). Female? 30.0 (RB).

Skull. Male. 111 (S3); 27.8 (FB); 12.0 (SC).

Mandible (c). Male? 38.1 (RB); 50.0 (ZZ).

Mandible. Female. 33.1 (RB).

Mandible. Male? 33.7 (RB).

Mandible (i). Female? 29.1 (RB).

60. Male. 28.1 (RB).

63. Male. 51.0 (ZZ); 35.1 (RB).

83. Female. 45.5 (ZZ); 32.1 (RB).

97. Female. 68.5 (G¹H); 37.2 (G2); 44.1 (G¹); 26.1 (NB); 49.5 (NH¹).

Male? 40.3 (O¹); 33.3 (O2); 25.0 (NB); 56.0 (NH¹).

Male. 122 (S1); 77 (G¹H); 39.4 (O¹); 34.8 (O2); 24.1 (NB); 50.1 (NH¹); 11.9 (SC).

Maxilla (a). Male. 54.1 (NH¹); 27.0 (NB); 75.1 (G¹H); 107.6 (GB); 27.0 (NB); 48.5 (G¹); 53.1 (G2).

Mandible (1). Male? 35.0 (RB).

Mandible (6). Male? 33.3 (RB); 45.1 (ZZ).

98. Female? 93.9 (B); 123 (S1); 25.3 (NB); 28.5 (RB); 21.1 (CYL).

Male. 96 (B¹); 125 (S1); 42.7 (ZZ); 34.1 (H1).

99. Male. 42.4 (ZZ); 37.6 (RB).

106. Male? 719 (SC).

111. Mandible (x). Male. 46.5 (ZZ); 38.8 (RB).

Male skull. 97.5 (B¹); 113 (S1); 10.5 (SC).

Female skull. 89.2 (B¹); 112 (S1).

Mandible (j). Female? 32.9 (RB); 38.3 (ZZ).

Maxilla (vi). Male? 47.0 (G¹).

Male. 71.5 (G¹H); 53.0 (NH¹).

112. Vault a. Female? 114 (S3).

Vault b. Female? 117 (S3).

Vault c. Male? 189? (L); 144? (B); 134 (S2); 115 (S3).

Palate (1). Female? 39.1 (G2); 48.0 (G¹); 87.5 (GB); 27.0 (NB).

Table 3. Craniometric Measurements of the More Complete Cranial Fragments from Sarachane

Skull Measurement	Bio- met- ric Sym- bol	Sarachane Individuals										
		3	9	21	36	48	52	54	54	54	54	56
Glab. Occ. L.	L		189	186	174			169	186	185	175	168
Max. Breadth	B		136	139	135			134	136	136	149	148
Min. Front B	B'			99	90	94	132	89	97	100		95
Basi-breg. Ht	H'						101		135			96
Bas-Nas. L.	LB								102			
Nas-Breg Arc	S1		128	118	115		117	118	130	121	125	118
Breg-Lambda A	S2		135	130	117			119	129	130	124	118
Lmda-Op. A	S3		117					105			116	108
Facial Ht	G'H								68	68		
Facial B	GB						101		92	92		91
Palate Breadth	G2						46.1		41.0			
Palate Length	G'1			47.0					43.8			45.5
Bizygomatic B	J								130			
Orbital B	O'1								40.5	42.1		41.1
Orbital Ht	O2								34.5	36.3		31.1
Foraminal L	FL											
Foraminal B	FB											
Nasal Breadth	NB	23.7					30.2					25.6
Nasal Ht.	NH'											47.6
Bicondylar B	W1	12.3		125		121	132					
Bimental B	ZZ	46.8		48.9		45.0	41.1					
Sagit. Ht.												
Mand.	H1				35.2	26.0	36.3					
Proj. L. Mand.	ML	108		110		105	108			24.3	25.6	
Condyle L.	CYL	21.7		23.0		21.8	23.4			48.2		
Ramus B	RB	34.2		32.2	35.0	32.4	32.4					
Sex		M	M	M	F	F	M	F	M?	M	F?	M

Skull Measurement	Bio- met- ric Sym- bol	Sarachane Individuals												
		97	112	112	112	112	112	112	125	42,47 or 48	127	127	142	143
Glab. Occ. L.	L	188	172	173	187	182	177	176	169	169	179	189	191	
Max. Breadth	B	137	133	135	135		143	140	135	134	135		152	
Min. Front B	B'	95	96	93	102	97			97	83				
Basi-breg. Ht	H'							125	126					
Bas-Nas. L.	LB								101					
Nas-Breg Arc	S1	133	119	125	121	119	118		109	114	124	125	130	
Breg-Lamda A	S2	136	133	121	135	122	108	128	124	130	125	127		
Lmda-Op. A	S3	112		107	112			110	112	103	118	105	120	
Facial Ht	G'H								63					
Facial B	GB								92					
Palate Breadth	G2									37.2				
Palate Length	G'1											42.1		
Bizygomatic B	J													
Orbital B	O'1													
Orbital Ht	O2													
Foraminal L	FL													
Foraminal B	FB							38.1	33.1					
Nasal Breadth	NB,							32.6	28.7					
Nasal Ht	NH								26.7	21.8		23.4		
Bicondylar B	W1								48.7					
Bimental B	ZZ													
Sagit. Ht.														
Mand.	H1													
Proj. L. Mand.	ML									43.8		45.3		
Condyle L.	CYL													
Ramus B	RB													
										33.2		32.2		
Sex		M	F	F?	M	M	F?	M	F	F	F	F	M	

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Table 4. Long Bone Measurements of the Sarachane Individuals

Specimen No.	Femur			Tibia			HuL1	RaL1	Sex
	FeL1	FeD1	FeD2	TiL1	TiD1	TiD2			
3							307	227	M
11					36.8	22.8			M
15		20.5	28.7	333	21.9	19.6	292		F
22a	446	25.2	29.7	348	33.6	23.1		249	F?
25	446?	25.8	31.0	365	38.7	25.3			F
27		23.0	30.1		33.4	22.5			F
36	447	27.8	30.4	373	35.5	24.7	319		F?
37	401	22.4	28.4	319	29.8	22.1			F
38	416	23.5	29.3	334	31.8	23.7	307	230	F
41		29.0	28.4	352	36.5	30.0			M
45				313	32.1	23.4			F?
45					34.6	24.4			M
46		27.7	33.0		37.2	26.1			M
47		23.6	28.5		37.4	29.0			M
48	436	21.5	29.6	346	31.9	21.5			F
49	476	28.3	31.2	372	34.1	26.3			M
50		25.6	30.5		33.7	24.6			F
52							321		M
54		28.4	33.1						M
54		20.7	30.6						F
54		21.4	27.8						F
54		26.2	33.0						M
54		21.5	30.0						F
58		22.0	29.6		31.0	21.1			F
59		25.5	29.5		32.7	28.0			M?
61		27.5	32.5		28.8	23.7			M
62	401	23.1	30.2		30.2	21.2	285	214	F
75		26.1	34.3	335	36.5	26.0			M?
83		26.0	29.2				288?		F
98				321	31.8	22.0			F
98		25.1	34.0						M
98		20.5	31.7						F
98				362	34.3	25.0			M
99		24.5	33.2		32.6	22.0			M
101		25.6	35.7						M
105		22.6	36.1		30.3	23.7			F
106	475	27.5	33.7	367	37.3	25.6			M?
107		29.2	40.1		38.0	26.7			M
110		26.4	39.6		37.1	27.0			M
111	392	21.6	29.2						F
111				324	35.5	24.2			F
111		27.1	34.4						M
111	442	24.0	34.1						F
111				326	30.7	24.3			F
122							300	228	M?
123		23.7	30.0						F
124		30.5	38.1						M
124		23.1	25.2				290		F
124		28.1	36.0		37.7	26.5			M
124		27.1	35.3		44.4	31.2			M
124		25.0	31.0		36.1	25.2			F
124		23.8	30.9		29.3	21.4			F
124		23.1	32.9						M

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Specimen No.	Femur			Tibia			HuL1	RaL1	Sex
	FeL1	FeD1	FeD2	TiL1	TiD1	TiD2			
124	430	23.7	31.3						F
124		23.2	32.3						F
124		22.8	32.4						F
125	409	25.0	32.4		32.3	24.4			F
Level 869		24.5	32.1		39.9	26.1	306		M
Level 1094				296	28.4	23.6			F
Level 1094							308		F
Level 1112		30.2	35.7						M
Level 1869	463	26.0	34.0		32.6	24.2	327		F
Level 1869							299		F

Palate (2). Female? 39.3 (G2); 43.0 (G'1).
 Vault. Male. 201 (L); 150 (B); 111 (B¹); 135 (S1); 132 (S2); 132 (S3); 45.0 (ZZ); 34.5 (RB).
 Palate (a). Female? 45.5 (G'1).
 Palate (e). Female? 41.6 (G'1); 25.4 (NB).
 Mandible (i). Female? 31.3 (RB); 19.3 (CYL).
 Female. 93 (B¹); 117 (S1); 124 (S2).
 Male? 173 (L); 119 (S1); 125 (S2).

117. Male. 49.0 (ZZ); 37.2 (RB); 23.1 (CYL).

118. Female? 27.3 (NB).

122. Male? 47.0 (G2); 23.6 (NB); 35.6 (RB); 22.0 (CYL).

133. Male. 100 (B¹).

LIST OF OTHER POST-CRANIAL LENGTH MEASUREMENTS (children)

4. Femur 245 mm, tibia 184 mm, humerus 174 mm.
5. Max. length fibula shaft 134 mm.
10. Femur 188 mm, tibia 150 mm, humerus 140 mm.
18. Max. length humerus shaft 198 mm.
19. Femur 222 mm, tibia 177 mm, humerus 166 mm.
23. Tibia 220 mm.
26. Humerus 189 mm.
37. Femur 261 mm.
38. Tibia (a) max. length 59.0 mm.
 Tibia (b) max. length 90.0 mm?
 Tibia (c) max. length 150.0 mm?

54. Radius max. length 86 mm.
 Humerus max. length 91 mm.
97. Tibia max. length 90 mm.
103. Tibia 105 mm (?), radius 82 mm.
106. (i) Femur 306 mm, tibia 239 mm.
 (ii) Femur 200 mm, tibia 154 mm.
 (iii) Femur 161 mm, tibia 130 mm.
115. Femur 158 mm, tibia 118 mm, humerus 125 mm.
116. Femur 112 mm, humerus 96 mm, radius 73 mm.
119. Femur 151 mm, tibia 122 mm, humerus 120 mm.
120. Femur 180 mm, tibia 140 mm, humerus 139 mm, radius 105 mm.
124. Max. length radius shaft 147 mm.

NOTE: Measurement is diaphyseal, without epiphyses present.

CRANIAL THICKNESS

It is a surprising fact that, although there has in recent years been much discussion in the literature on vault osteoporosis or porotic hyperostosis, particularly in relation to forms of anaemia, hardly anything is known of variation in actual vault thickness. As I was aware of the possibility of reactions to anaemia in the Sarāçhane sample, it seemed relevant to measure frontal and parietal thickness in fixed regions of these bones (i.e., on the frontal prominence, but to the side of the median plane; and in the central area of the parietal bossing).

Although only 21 skulls could be so measured, the

figures are surprisingly variable (see Figure A). The means are: for 11 males, frontal thickness 6.9 mm, parietal thickness 6.5 mm; and for 10 females, frontal thickness 6.8 mm, parietal thickness 5.8 mm. The pooled male and female sample gave means of 6.9 mm and 6.2 mm, respectively. Figure A shows that both males and females display considerable variation, but with the majority displaying slightly greater frontal thickness. In case one could note, even in this small sample, associations between other abnormality and very thin or thick skulls, various anomalies have been noted in the figure. These are indicated as *FL*, meaning the occurrence of some form of external frontal lesion; *H*, to signify the occurrence of internal frontal hyperostosis; *SD* where there is also noticeably thick spongy diploe; *P* where there is external vault pitting; and *DD*, where there was a 'dense' diploe. *M* indicated the mean position for each of the sexes. Frontal lesions (*FL*) occur in both thick and thin skulls, and have no clear

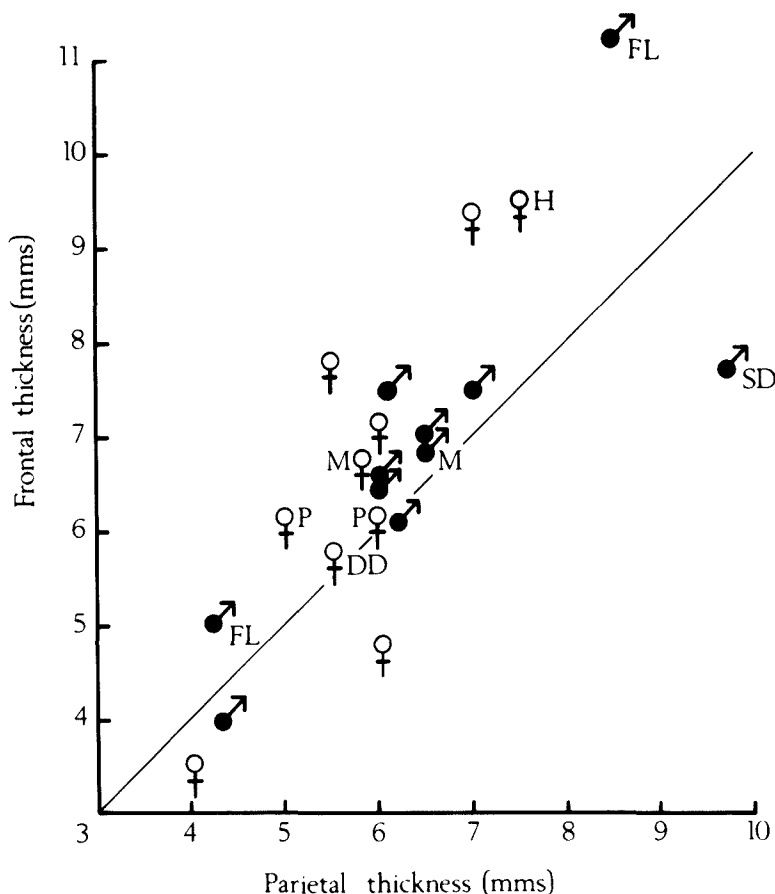


FIGURE A. Cranial Vault Thickness in Individual Sarachane Adults, as Revealed by Frontal and Parietal Dimensions (FL, H, SD, M, P, or DD refer to means or pathology discussed in text)

significance. Internal frontal hyperostosis (*H*) is mainly seen in older females, and seems to explain the disproportionately large frontal thickness in one Sarachane female. However, a male with a large amount of spongy diploic tissue (*SD*), has a particularly thick parietal boss area, and this could indicate perhaps a subclinical level of anaemia. Surprisingly, two skulls that displayed some degree of external vault pitting (*P*) showed no vault thickening, and the pitting might thus have been more indicative of a relatively acute nutritional problem.

While no clear conclusions can be drawn from this vault thickness evidence, the enquiry seemed justified, and there is clearly potential value in studies on cranial thickness.

OSTEOMETRIC COMPARISONS

It is unfortunate that although parts of large numbers of skulls and long bones were examined, very few provided more than extremely incomplete runs of measurements. As the table of osteometric means (Table 5) indicates, sample numbers were in most cases far from those desirable for more detailed multivariate comparisons. A further problem has been the very restricted amount of suitable comparative material.

However, some brief comment has been made separately about stature, and a number of additional observations might usefully be made here. Regarding the cephalic index in the Sarachane sample (75 in males, 80 in females) this shows considerable variation in late prehistoric and protohistoric groups. Necrasov¹ has shown interesting cephalic index changes in parts of Romania, from neolithic to recent times, with high index values occurring after about the thirteenth century A.D. The male mean index for Sarachane is moderately low, and suggests that a significant change to brachycephaly had not occurred in Turkey by Byzantine times (as far as Sarachane can be used to represent the population as a whole).

In the case of the mean platymeric index ($100 \times \text{FeD1/FeD2}$), the Sarachane males and females are noticeably similar (79.6 and 79.4, respectively). However, the male index value is noticeably higher than both prehistoric Turkish and Greek series (Angel)² and recent Turkish data, and this variation clearly demands further study in relation to future Turkish skeletal finds. In the case of the platycnemic index, Sarachane males and females are again very similar in mean values (72.7 and 72.4, respectively), and are again noticeably high when

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Table 5. Osteometric Means which Could be Calculated for the Saragane Sample

	Males	Females
<i>Cranial</i>		
Maximum length (L)	185.1 (14) ¹	173.2 (12)
Maximum breadth (B)	139.6 (10)	138.1 (10)
Min. frontal breadth (B')	98.6 (14)	93.1 (13)
Basi-breg. height (H')	130.0 (2)	126.1 (1)
Frontal arc (S ₁)	124.5 (18)	118.9 (15)
Parietal arc (S ₂)	128.8 (13)	122.5 (12)
Occipital arc (S ₂)	114.4 (8)	109.3 (8)
Facial height (G'H)	70.8 (4)	66.0 (2)
Facial breadth (GB)	96.8 (5)	92.0 (1)
Palate breadth (G ₂)	46.8 (4)	37.2 (2)
Palate length (G' ₁)	46.2 (4)	43.2 (5)
Orbital breadth (O' ₁)	41.2 (3)	39.6 (2)
Orbital height (O ₂)	34.0 (3)	31.9 (2)
Nasal breadth (NB)	25.8 (9)	24.8 (7)
Nasal height (NH')	51.3 (6)	49.1 (2)
Bicondylar breadth (W ₁)	128.0 (4)	121.0 (1)
Bimental breadth (ZZ)	46.0 (14)	42.7 (9)
Sagit. ht. mandib. (H ₁)	35.2 (2)	30.6 (2)
Proj. length mandib. (ML)	108.0 (4)	105.0 (1)
Condyle length (CYL)	22.6 (6)	20.7 (3)
Ramus breadth (RB)	35.3 (19)	31.5 (16)
<i>Long Bones</i>		
Max. femur length (FeL ₁)	475.5 (2)	427.4 (12)
Min. fem. a-p. diam. (FeD ₁)	26.9 (22)	24.3 (28)
Transverse fem. diam. (FeD ₂)	33.8 (22)	30.6 (28)
Tibia length (TiL ₁)	357.6 (5)	333.2 (12)
Max. tib. a-p. diam. (TiD ₁)	36.2 (17)	31.9 (21)
Proj. transv. diam. tib. (TiD ₂)	26.3 (17)	23.1 (21)
Max. humerus length (HuL ₁)	308.5 (4)	301.7 (9)
Max. radius length (RaL ₁)	227.5 (2)	231.0 (3)

¹Numbers in parentheses are the individual measurements available in the sample.

compared to prehistoric Greek and Turkish material. These differences are problematical at present, but may well be related to environmental factors during growth and early adulthood. As for much of Europe, it is a sad reflection on excavation priorities that really so little is known of the biology of post-Roman populations. The Saraçhane material, albeit fragmentary, does provide some useful data for future comparative studies.

STATURE

Owing to the fragmentary nature of much of the material, the numbers of long bones available for stature calculations were far from ideal. Added to this problem is the fact that bones of more than one individual were commonly mixed together. For these reasons, I have considered stature in a number of different ways, and these are summarized in Table 6.⁵ In section A, I have calculated crude stature estimates, using all available long-bone lengths together. As expected, there is a noticeable difference between males and females. In section B, bones that could represent one individual are given as only one stature estimate (that with the least error of the estimate). It will be seen that this makes little difference to mean stature estimates. Finally, the two largest bones of the legs (femur and tibia) have been separately considered (with a consequent further reduction in sample size), and it can be seen that there is little overall modification of overall stature. The exception is male stature from femur length, but here only two specimens were available for study.

In view of the size of the Saraçhane sample, only tentative comparisons can be made with other stature information. Mean statures in earlier eastern Mediterranean populations vary from about 166 cm to 170 cm (pooled male + female), with male/female differences of about 10 cm (Lerna males = 166.8 cm, females 154.2 cm).³ In comparison with the limited information from other areas, the pooled mean stature (male + female) for Saraçhane of 162 cm is low, perhaps suggesting a possible stature decrease from late prehistoric to protohistoric times in some areas. Stature in young Turkish males today, however, is 169.3 cm,⁴ which is remarkably close to the Saraçhane males. It should be remembered, however, that stature results from a combination of genetically based factors and environmental influences (especially nutrition), and thus attempts to demonstrate simple trends in such dimensions may greatly oversimplify what is in fact a complex situation.

NON-METRICAL TRAITS

Owing to the very fragmentary nature of the material studied, and the shortage of comparative data from a similar time period and eastern Mediterranean localities, only brief comment can be made on the pattern of non-metrical frequencies. Definitions of these traits are given in Brothwell⁶ and do not need further elaboration here. Although the traits are known to have varying aetiology, there seems little doubt that their expression is dictated to a greater or lesser degree by genetic factors. Because of this, and for the sake of future possible comparisons, the trait frequencies which could be usefully studied are given in Table 7.

In the case of the wormian bones, it is common in Europe and the Mediterranean area to have high percentages of wormians present, and in fact the Saraçhane figure is remarkably similar to that for a large Iron Age sample from Lachish (63.4%).

Metopism also tends to have a frequency of under 10% in this area, (Lachish being 8.8%), and thus the Saraçhane figure is not notable.

On the other hand, the mandibular tori tend to have frequencies of between 19% and 37%, with the Lachish population showing 25%. These figures are noticeably higher than the low frequency of 14.7% (slight/medium degrees) suggesting possible genetic distinctiveness.

This is perhaps further supported by the fact that the Saraçhane group shows a noticeably high palatine torus figure (22.4%), which is much higher than at Lachish (3.1%) and other regional figures known to me.

CRIBRA ORBITALIA (Orbital osteoporosis)

In the past, this pitting of the upper frontal plate of the orbit has been tentatively included with nonmetrical traits. There is an ever growing literature discussing this abnormality and its possible aetiology. There seems little doubt now that this condition is 'environmentally' linked, although a number of factors may be involved. It can be associated with leprosy, and possibly with some form of malnutrition. Research at present is tending to favour a link between this orbital change and degrees of iron deficiency anaemia. In the Saraçhane series, 166 skulls or frontal fragments could be studied for this condition, and of these, 42 (25.3%) displayed a slight degree of orbital change; 11 (6.6%) had a medium degree of pitting, and 2 (1.2%) showed very considerable pitting. On present evidence, then, there is the possibility that the orbital changes show

HUMAN BONES

Table 6. Distribution of Stature in Saraghane People
Using Median Estimates

Stature (cms.)	A ¹		B ²	
	No. Males	No. Females	No. Males	No. Females
150				
151		1		1
152		1		1
153		2		2
154		2		
155		4		4
156		3		1
157		1		1
158		3		2
159				
160		1		1
161		2		1
162		2		1
163	2	2	2	1
164		3		2
165	4	2	2	1
166				
167	1	1	1	
168		2		1
169	1		1	
170	1	1	1	1
171	1		1	
172	1			1
173		1		
174				
175	2		2	
176				
177				
178				
Mean Stature	168.1 cms	159.9 cms	168.3 cms	159.5 cms

Note: Trotter and Gleser equations (1952, 1958) are employed.

Additional stature estimates: Male--femur length, 175.0 (2); tibia length, 168.6 (5).

Female--femur length, 159.6 (12); tibia length, 159.5 (10).

¹Includes all estimates from all complete long bones.

²Excludes bones that might belong to the same body.

THE CATALOGUES

Table 7. Nonmetrical Traits which Could Be Recorded at Sarachane

<i>Lambdoid wormians</i>			
Skulls examined	Wormians present	% present	Average no. ¹
57	36	63.2	3.5
<i>Metopism</i>			
Skulls examined ²	Metopic present	% present	
186	12	6.5	
<i>Torus mandibularis</i>			
Total mandibles	Slight torus	Medium torus	Marked torus
129	16 (12.4%)	3 (2.3%)	0
<i>Torus auditivus</i>			
Auditory meati examined	Tori noted		
192	0		
<i>Torus palatinus</i>			
Palates examined	Slight torus	Medium torus	Marked torus
58	10 (17.2%)	3 (5.2%)	0
<i>Torus maxillaris</i>			
Upper jaws examined	Slight torus	Medium/ marked torus	
72	5 (6.9%)	0	
<i>Parietal foramina</i>			
Skulls examined	Both foramina present	One foramen only	No foramina
48	34 (70.8%)	12 (25.0%)	2 (4.2%)

¹Per lambdoid suture.

²Or fragments of frontal bone.

that well over a quarter of the Saraçhane people were displaying some (? related) environmental stress at the time of death.

FRACTURES AND OTHER TRAUMAS

19. Two foot-bones show anomalies. One may be a healed fracture with associated joint arthropathy. The other is swollen along the shaft, perhaps owing to injury and infection, and also shows arthropathy.

27 or 28. There is a small shallow crater on the external frontal surface, just above the sinuses. Diameter 15 mm. This is a well-healed injury or infection.

34. Child. Small depressed area (10 x 10 mm) on the right half of the frontal bone above the orbit. Healed.

52. Adult male. There is a fractured and well-healed right ulna. The injury was to the distal third of the shaft, well above the wrist.

54. Adult male. There is a small area of shallow irregularity on the left side of the frontal bone, extending down to near the glabella. This could be the result of infection following scalp injury, followed by healing. The proximal half of an ulna shaft displays a healed fracture. Shallow depression, at most 2 mm deep, on the left side of an adult male frontal bone. Dimensions 33 x 25 mm. The surface of this lesion is smooth, suggesting a well-healed injury. Well-healed fracture to the lower end of the radius.

56. Adult male. There is clear evidence of an old but healed broken nose. Both the nasals and maxillae are involved. Adult. On the left parietal, near the temporal line, is a small healed 'puncture' lesion (dimensions 15 x 4 mm). There is evidence of only a small reaction area on the outside and no endocranial reaction even though there is a small central perforation through to the endocranial surface. This could be the result of a 'clean' restricted injury with a pointed end.

83. Adult female. Well-healed fracture of the right humerus, mid-shaft.

97. Adult female. Both nasal bones show a simple fracture about halfway along their lengths. This has healed well, but with some deformity.

98. Adult. Two healed mid-shaft fractures of ribs.

110. An ulna displays a healed fracture about 40 mm from the distal end.

111. Mixed series. Two frontal fragments, from two separate individuals, display shallow depressions (one left, one right) near the temporal line. In both cases these are about 20 mm in maximum length. A possible cause of these is a restricted head injury.

112. Adult male. In the middle zone of the external frontal is a cigar-shaped shallow depression, which could possibly be the result of an old healed injury. It is roughly 21.0 mm long and 8.5 mm wide.

124. A mid-shaft fracture of the right ulna. Well healed with no deformity.

Lower shaft fracture of a right ulna. The broken ends have not united, but callus formation is advanced. Fracture 55 mm from distal end.

Left ulna, with healed fracture at the distal end.

125. Adult male. The body of the mandible is broken but well healed on the right side (between 76).

127 or 128. The distal end of a fibula is swollen, and seems best interpreted as a healed fracture.

143. Adult male. Two metacarpals are fractured but well healed. There is some associated joint arthropathy and a phalanx shows a minor exostosis. A small depression on the left parietal is now shallow and smooth, but may indicate injury and infection.

ORAL PATHOLOGY

One of the commonest related complexes of pathology is that concerned with the dentition and the mouth in general. The Saraçhane material presented considerable evidence of a number of distinct conditions, although to some extent nearly all of these tend to be related to age and the nature of the food eaten. It is not my intention to discuss the complex aetiology and relationships of oral diseases which has been considered recently by Hillson.⁷ Of most importance here is to present the data for the site under consideration. Table 8 summarises the conditions that were considered in detail in pre-Turkish material. Fragments of child jaws were excluded, the rest being pooled in order to ensure that sample sizes were large enough to give some significance to the results.

a. In the case of the congenital absence of third molars, it was not possible to X-ray all jaws, but nevertheless it seems likely that few molars were so impacted and buried in the jaw that they were missed. In all, only 274 third-molar positions were available for

study, but the results were interesting. Although the majority of jaw fragments could not be sexed, a number could, and these displayed a difference of over 7 percent between males and females. This could be a phenomenon associated with the limited samples, however, as the percentage absent in the sex-unknown category was somewhat lower than either value (but lower than the total overall percentage). Regrettably, there is little material from the eastern Mediterranean with which to compare this data, but what archaeological material is available suggests that percentages of third-molar absence (compared with total possible third molars) are usually under 10%, that is, far lower values than in this sample being studied.

b. Caries cavities were noted in 9.6 percent of the total teeth available, and again female percentages were lower than for the males. These values are by no means high, and indeed in earlier Greece (ca. 3000-1000 B.C.) the caries frequency had already risen to 12.1 percent.⁸

c. Tooth loss (*ante mortem*) is associated with and partly determined by caries, pulp exposure, apical abscesses, and periodontal disease. In the total of 2,143 tooth positions that could be studied, 11.4 percent displayed loss before death. This figure is less than that for Middle Minoan material⁹ and a collection from Gran Canaria,¹⁰ but not less than early Greek specimens. As for caries, the males at Sarcane had noticeably more *ante mortem* loss than the females, perhaps indicative of minor nutritional differences, as well as variation in chewing stresses.

d. Apical abscesses were far less common (a total of 5.5%), although again fewer were noted in the females.

e. Enamel hypoplasia was scored in terms of the maximum expression as seen on at least a number of teeth. This to a large extent reflects the occurrence of phases of poor health during childhood (especially recurring nutritional problems or infectious disease). Only 39 individuals had sufficient teeth to permit this to be scored, but nevertheless it was surprising to find that 69.2 percent of the sample showed at least slight hypoplasia. In view of this, one may question whether the Sarcane children commonly met with phases of malnutrition or infectious disease, sufficient to obstruct normal tooth calcification.

f. Various factors encourage the development of periodontal disease (leading to alveolar bone recession). These include states of malnutrition, food impaction, and large calculus deposits. Slight to medium degrees of alveolar recession (21.7 and 24.6 percent, respectively) in a predominantly young adult sample again suggests that environmental factors were making this a common problem in the community.

ARTHROPATHY

All the evidence of degenerative joint disease appears to be in the form known usually as osteoarthritis. It may be summarised as follows:

9. Adult male. Two thoracic vertebrae show spicular ossification within the spinal canal on the neural arch surfaces.

22a. Adult female. Slight to medium degrees of osteophytosis on at least three lumbar vertebrae. On the inner articular surface of the right patella is a deeply penetrating lesion 11.2 x 4.5 mm, which seems best interpreted as an osteochondritic defect.

36. Young adult female or middle-aged adult of uncertain sex (i.e., mixed material). There is slight to medium arthritic change on six cervical, thoracic, and lumbar vertebral bodies. In the lower part of the column, the arch facets are also involved in degenerative changes.

There is also medium arthritic change at both knees (tibiae, femora, and patellae). The right humerus head is slightly involved. Some tarsals and metatarsals of both feet show mild to moderate changes suggestive of rheumatoid arthritis (?).

45. Adult. Medium degree of arthritic change at the lumbar-sacral joint. Metatarsals and tarsals of both feet show moderate arthritic change, and especially at the big toes.

48. Parts of three adults mixed (one female and one male at least). Slight to moderate osteophytosis were seen in two cervicals and one thoracic. One toe metatarsal has moderate arthritic changes at the distal end. In possible association with the vertebral arthropathy are internal spicular processes on the neural arches of two thoracic vertebrae.

54. Mixed bones (post-cranial). Two vertebrae show severe osteophytosis and six vertebrae show neural arch spicules.

55. A metacarpal shows severe arthritic change (? traumatic). Metacarpal displaying a nodular distal end, by the joint surfaces. Another metacarpal, with a nodule proximally, may be from the same individual.

59. Adult male. Medium arthritic change was seen at the proximal end of an ulna fragment. Marked changes were seen in a metatarsal of the big toe.

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Table 8. Oral Pathology

Congenital Absence of Third Molars

	Teeth Present ^a	Number Absent	Total P + A	% Absent
M	42	13	55	23.6
F	42	8	50	16.0
Sex?	146	23	169	13.6
Total	230	44	274	16.1

Caries

	Number of Teeth	Teeth with Caries	% Caries
M	266	26	9.8
F	214	16	7.5
Sex?	675	69	10.2
Total	1155	111	9.6

Tooth loss (ante mortem)

	No. Tooth Positions	Teeth Lost	% Loss
M	501	76	15.2
F	448	43	9.6
Sex?	1193	126	10.6
Total	2143	245	11.4

Abscesses

	No. Tooth Sockets	Abscesses Noted	% Abscesses
M	433	27	6.2
F	405	15	3.7
Sex?	1417	81	5.7
Total	2255	123	5.5

Hypoplasia (enamel)

Total individuals studied	= 39
Hypoplasia absent	= 4
Hypoplasia slight	= 27 (69.2%)
Hypoplasia medium	= 7 (17.9%)
Hypoplasia marked	= 1 (2.6%)

Periodontal Disease^b

Total individuals studied	= 69
Disease absent	= 34 (49.3%)
Slight recession	= 15 (21.7%)
Medium recession	= 17 (24.6%)
Considerable recession	= 3 (4.3%)

^aOr lost after development.

^bRecorded as degrees of alveolar recession to some area of the jaw.
Some duplication in fragments is possible.

61. Adult male. Mainly slight osteophytosis on seven lumbar and thoracic vertebrae. Slight arthritic involvement at the proximal end of an ulna. One metatarsal of the big toe displays moderate arthritic changes.

62. Adult female. Slight to medium osteophytosis in one thoracic and three lumbar. Some neural arch facets were also involved.

63. Adult male. Although a very fragmentary column, mild osteophytosis was seen in a cervical, two thoracic, and one lumbar. There were some neural arch facets showing arthritic change also, and nine arches displayed spicular processes inside the canal area.

79. Adult. Six vertebrae show a range of osteophytosis from slight to considerable.

99. Adult male. Three thoracic vertebral bodies show mild and restricted osteophyte development.

109. A metatarsal shows medium arthritic change distally.

110. One scapula displays severe arthritic joint changes.

111. A toe phalanx displays an eroded and swollen border of the proximal articular surface.

A metatarsal with slightly swollen, as well as noticeably eroded, zones, at the distal articular surfaces.

122. Adult male. Slight arthritic changes on two or three vertebral bodies.

125. Adult male. Edentulous (? elderly). Slight to medium osteophyte development on seven vertebrae (cervical, thoracic, and lumbar). There are also severe changes at the right elbow (? traumatic) with some eburnation at the humerus and radius.

143. Adult male. Slight to medium osteophytosis on six cervical, thoracic, and lumbar vertebrae. A medium degree of arthritic change is also seen at the right elbow (involving humerus, ulna, and radius).

Adult female. Five vertebral bodies (cervical, thoracic, and lumbar) display slight to medium osteophytosis. At least three metacarpals show arthritic changes. A scapula shows mild joint changes.

NEOPLASMS

1. Right parietal fragment has a shallow osteoma (6.4 mm diam.).

36. ? Female young adult. The external surface of both parietals displays two or three areas of slight prominence, and in one case this is sufficiently marked to be regarded as a button osteoma (right parietal).

54. Adult male. There is a small shallow osteoma on the left parietal, about 5 × 5 mm in size.

Adult female. On the right parietal (near the medial boss) is a shallow osteoma, in dimensions 8 × 8 mm.

Frontal-parietal fragment. Adult. At least four shallow mounds of compact bone, no more than 7 × 7 mm in the largest. Usually called osteomas.

An occipital fragment with a large osteoma on the right side near the lambdoid suture (measuring 19 × 16 mm, with a height of about 2.5 mm).

111. A frontal bone with one well defined small shallow raised area (and a 'rash' of smaller mounds in the area). Largest mound = 6 × 6 mm. ? osteoma.

112. Mixed material. One frontal fragment shows two well defined lumps near midline, both with dimensions approximately 6 × 6 mm. There also appear to be the 'beginnings' of two more.

125. Osteoma-like mound on a left parietal near the sagittal suture. The approximate dimensions are 15 × 15 mm.

143. Adult female. On either side of the sagittal suture, just below the parietal foramina, are two small mounds, which may well be osteomas.

Adult, male. On the left side of the frontal bone is a shallow dense mound, approximately 18 mm in diameter. Possibly an osteoma.

Adult male. There are two very shallow cranial osteomas, round and measuring 4.5 × 4.5 mm and 5.0 × 5.0 mm.

LEPROSY AND TREPONEMATOSIS

Within the general category of *Other Pathology* are listed numerous instances of periostitis (possibly at times extending to osteomyelitis). It is very unlikely that these are all the result of infection spreading from wounds in overlying soft tissue, and this is of course especially doubtful where there is symmetrical development of inflammation on both sides. It seems more likely that this long-bone pathology represents patterns of infection spread via the circulation of the blood, and

the major disease groups worthy of consideration here are leprosy and treponematoses. It may well be significant that much of the long-bone pathology affects the tibia and fibula, an area of predilection for leprosy (which also modifies the hands, feet, and facial areas). However, it is puzzling that for all this pathology of the lower leg, there is no good supporting evidence for facial leprosy or characteristic changes in the hands and feet. This does not rule out the disease, but makes more confident diagnosis impossible. The occurrence of periostitis on some femora is not typical of leprosy, but occurs commonly in treponemal disease (a disease group which includes syphilis). There is thus good reason to consider this leg pathology as equally indicative of venereal or endemic syphilis. But again there is a problem in that one would expect associated changes in the skull, both the vault and possibly the facial area. However, although there are a number of healed crater lesions on the vault and a few cases of jaw periostitis, nothing typical of cranial treponematoses was noted. We are therefore left without confirmation, although as in leprosy, we cannot rule out treponemal disease. The long-bone pathology would thus seem best listed under the general category of *Other Pathology*, although clearly the occurrence of leprosy and/or treponemal disease in the Saragane population cannot be ruled out.

TUBERCULOSIS

Although inflammatory reactions in a number of bones could indicate tubercular osteomyelitis, the two most likely cases are as follows:

55. Child's thoracic vertebra with a destructive osteomyelitis of the centrum. There is clearly abscess formation, but no collapse.

97. Adult. Twelve cervical and thoracic vertebrae are incorporated into a deformed columnar mass. All but three vertebral bodies have been severely damaged or destroyed by the osteomyelitis. In addition, and as a result of the massive collapse of the vertebral bodies, there is a 30° kyphotic angulation.

125. At least five thoracic vertebrae are involved in an extensive osteomyelitis, collapse, and fusion. There is a 45° kyphotic angulation. The neural arches as well as the vertebral bodies are involved.

TREPHINING OR CONGENITAL?

In the adult female (112) there is puzzling evidence of pathology. On the lower aspect of the left parietal is an irregular hole, approximately 12.1 mm long and 27.6 mm in height. The margins of this hole thin off as in a healed trephine margin. The endocranial surface is normal. The hole does not indicate the presence of a large wormian bone near the squamous process of the temporal, and it seems unlikely to be the result of an injury (as a blow to this fragile area would surely have produced clear fracturing as well). One is therefore left questioning whether this is an unusual form of trephining, low down the head and near to the ear.

CRADLING DEFORMITY?

4. Child. The cranial vault is noticeably asymmetrical. This appears to be the result of a growth defect rather than post mortem distortion. Some form of cradling, with restricted head movement, might have been involved.

OTHER PATHOLOGY

4. Child. A clear case of scaphocephaly, with the sagittal suture completely obliterated.

9. Adult female. Near the midline of the frontal bone, and about 50 mm above nasion, is a small rounded depression. This could be the result of an old localised infection or injury.

12 or 13. Possible sinusitis is seen on the inner surface of the left maxillary sinus, where new subperiosteal bone is formed above an area of tooth loss.

16. Child. Small exostoses occur about 47 mm above the distal epiphyseal line of both humeri.

20. Adult. Fragments of the right femur and tibia show mild periostitis, with some shaft swelling and striations.

29, 30, 31, 32. Sub-adult. Male? One tibial shaft shows mild periostitis in its distal half.

35. Child. An incomplete tibia shaft, showing a localised zone of striations and subperiosteal change extending over approximately 32 × 10 mm.

36. Young adult female. The bone of the internal area of the skull appears to be especially 'dense,' that is, the diploic tissue does not show the typical large spongy tissue.

38. Adult female. Approximately 13 mm of subperiosteal new bone along the shaft of a fourth metatarsal. Aetiology uncertain.

39. Mixed material. Both femora from one individual are markedly thinned and deformed in shape. In the case of the right femur, part of the proximal end remains and shows reduced trochanters with a small low-angled neck (and probably head, although this is missing). A cranial vault, which may be associated with this individual, displays general surface osteoporotic pitting. This individual appears to have suffered serious disuse atrophy in the limbs, and although the cause must remain uncertain, especially in view of the incompleteness of the skeleton, poliomyelitis is a distinct possibility.

41. Adult male. At the distal end of the lateral contour of the linea aspera of the right femur, there is a well defined and prominent exostosis, 18.9 mm in length and 10.7 mm in depth. Its aetiology is uncertain, although trauma is a possibility.

41, 45, or 47. Adult female. Both fibulae show mild irregularity and swelling due to periostitis. This type of pathology could be indicative of leprosy, but there is no other confirmatory evidence.

45. Adult male? Mild striations, suggestive of very early periostitis on one tibia shaft.

47. Skel. B. Adult male. An old healed lesion of a hand phalanx, now seen only as a swelling. Most of the right tibia is swollen along the shaft, and the tibia is similarly involved in inflammatory changes.

49. Adult male. On the anterior aspect of the right femur shaft, and in mid-zone, is a small area of irregularity and swelling 16.5 mm in length and 6.0 mm broad.

52. Adult male. There is evidence of sinusitis in both maxillary sinus chambers, which show irregular patches of subperiosteal new bone on all sinus walls. There is no evidence in this case that the condition is associated with either abscessing or perforation of the sinuses from infected teeth.

54. Adult male. There is some degree of mild external skull vault pitting. It is difficult to suggest a cause from such minor changes, which could especially be linked with minor dietary problems or anaemia.

Adult female. Slight pitting exteriorly on the posterior cranial vault.

Adult male. In the left cheek area, there is evidence of infection (periostitis) having spread up the alveolar bone from the region of the third molar.

Fragment of parietal. Adult. There is a small shallow 'osteoma' (about 7.0 × 5.5 mm). On the same fragment, there is a healed bevelled area (half-moon-shaped in what remains), with an opening to the endocranial surface extending at least 16 mm in width. The beveling decreases from 7.2 to 0.0 mm. There is a slight roughening (? an old healed reaction) on the endocranial surface just in the region of the opening. Although the incomplete nature of this area prevents a confident interpretation of this evidence, the extent of the beveling and of the perforation suggests trephination rather than a sequel to injury.

(A5) Child. Tibia with periostitis of the shaft.

(A6) Striations, pitting, and swelling of the right tibia shaft near the nutrient foramen, indicative of localised periostitis.

(A7) Left tibia shaft with mild periostitis.

(A9) A marked scoliotic deformity is evident in the articulation of eleven vertebrae.

(A12) A fragment of femur shaft, showing swelling which is likely to be the result of a long-term osteitis.

(A13) Right side of a frontal fragment, just above the orbital area. There is a bevelled half-circular zone of healing, with an aperture through to the endocranial surface of at least 15.5 mm. The most likely interpretation of this pathology is that it is a fragmentary trephine aperture.

(A14) Fragment of tibia shaft, with minor swelling and striations, indicative of periostitis.

(A15) Adult. An incomplete metatarsal with a swollen shaft.

(A16) Small fragment of tibia, showing some swelling as a result of inflammation.

(A17) A tibia with restricted swelling in the most distal quarter of the shaft.

55. Right mandibular ramus of a young child, showing massive osteomyelitic swelling.

56. A maxillary sinus shows some subperiosteal new bone indicative of sinusitis.

Mandible *b*. There is extensive periostitis around the

outer surface of the mandibular body, extending to some extent under the chin.

Maxilla 7. An abscess at 6 perforates the maxillary sinus, and there is evidence of periostitis in the interior.

63. Adult male. One vertebral body shows marked enlargement of nutrient foramina on the anterior aspect.

75. Adult male. The tibia and fibula of both legs are affected by some form of inflammatory change. In the right leg, the subperiosteal thickening, pitting and striations are quite marked. In the bones of the left side, there is evidence of only mild periostitis (mainly striations on the distal third of the shafts). Not all bones of the feet remain, but those that do, show no evidence of leprosy changes.

97. Adult male. At upper molars 65, there are perforations through into the maxillary sinus cavity, with a subperiosteal reaction and some new bone formation (by no means smooth).

(A18) In the left maxillary sinus of this adult are thin plaques of subperiosteal new bone on the posterior wall, a sequel to sinusitis.

(A19) A fragment of tibia showing swelling and striations indicative of a mild periostitis.

(A20) Occipital fragment of a young child, with a marginal zone of marked external osteoporosis.

(A21) One lumbar vertebral body has marked irregularity and subperiosteal extra bone on its 'vertical' face. There is no collapse, but clearly this is an inflammatory change that suggests an early stage of tuberculosis or perhaps brucellosis, rather than another condition.

(A22) Vault fragments from one individual, showing marked osteoporotic pitting and some irregularity (? inflammatory).

(A23) A fragment of long bone, apparently from the proximal end of a humerus, showing severe deformity at the epiphyseal zone. ? aetiology.

(A24) Body of a thoracic vertebra, showing moderate compression and some osteophytosis. ? the result of senile osteoporosis.

(A25) A tibia shaft fragment, showing periostitis.

(A26) A fibula shaft fragment, showing periostitis.

(A27) A tibia shaft fragment, with changes indicative of periostitis.

(A28) Part of a femur shaft, showing striations, pitting and some subperiosteal new bone (again indicating periostitis).

(A30) Striations and some subperiosteal new bone on a left tibia shaft, indicate mild periostitis.

98. Right maxillary sinus cavity has extra osseous tissue deposited in an irregular mass. Owing to breakage, it is not possible to establish how this might be associated with oral pathology. Severe sinusitis. Possibly adult female.

Left tibia shaft shows noticeable patchy areas of subperiosteal new bone resulting from periostitis.

99. Adult male. Cortex of tibia is pitted (? early periostitis).

102. Adult female. There is noticeable, but not yet extreme, biparietal thinning. Maximum diameter of the area involved is about 40 mm in both cases. Fairly symmetrical in shape and size.

109. Mixed material. There is slight internal frontal hyperostosis in one fragment. Two tibiae show mild periostitis.

110. Adult. The distal shaft of a right humerus displays a small exostosis. Another with well-defined osteoma on a left parietal.

111. Two tibiae from different individuals, both showing mild periostitis in the lower half of the shaft.

(A31) Three thoracic vertebrae showing marked antemortem destruction of the centra, and with clear evidence of white deposits within these 'erosive' lesions.

The combination of a destructive process with the deposition of a white material is puzzling. The site of the pathology is not suggestive of gout, and the deposits do not suggest tubercular osteomyelitis. An alternative is that this pathology is the result of neoplastic deposits.

(A44) The frontal bone of a child, with a round zone (13 × 16 mm) of subperiosteal new bone. ? inflammation or ossifying haematoma.

(A46) Part of a maxilla, in which subperiosteal deposits of irregular new bone are present in the sinus cavity.

(A47) Immature right ulna, showing periostitis along part of the shaft.

112. Mixed material. A tibia and fibula (? same individual) show noticeable swelling, suggesting a long-term periostitis. Another tibia displays mild periostitis with some striations and subperiosteal new bone. Another two tibiae show noticeable periostitis of the long-bone shafts.

Medium to severe osteophytosis on two out of five remaining vertebrae. The left tibia had mild periostitis in the distal half of the shaft.

Adult female. The external surface of the cranial vault shows extensive but mild osteoporotic pitting.

Adult male. In the central external area of the frontal bone is a zone (c. 50 × 30 mm) of mild surface irregularity. This might indicate an old osteitis, following a scalp lesion or infection.

Skull. There is clearly an early development of endocranial frontal hyperostosis. The internal frontal irregularity is general, with early bone deposition in smooth zones.

Skull. Adult female. This is probably an elderly individual, and shows a general thinning of the skull, with very thin outer and inner vault tables. There is also clear evidence of advanced biparietal thinning, the maximum zone affected being about 52 mm in length. The maximum thinning gives a thickness of 0.2 mm.

Maxilla. The right maxillary sinus shows irregular patches of subperiosteal new bone on the interior sinus walls.

113. One tibia shaft shows mild periostitis.

116. Child. Parietals show noticeable external osteoporosis.

119. Child. There are patches of osteoporotic surface pitting on the parietals, frontal and temporal bones. ? nutritional. ? anaemia.

123. Adult. One right tibia shows mild periostitis, especially on the medial side of the shaft.

124. (A37) Fibula shaft shows old and healing inflammatory swelling.

(A38) Two femora (same individual) showing patches mid-shaft of a fine-meshed and pitted subperiosteal reaction—especially to the sides of the linea aspera. There

are probably two tibiae from the same person, and these also display mild periostitic reactions in the central region of the shaft.

(A42) An old and mainly healed periostitis of a male right tibia shaft.

125. (A50) Adult female. Right maxillary sinus shows about four different areas of subperiosteal new bone. Sinusitis.

127. Two tibiae (from different individuals) show varying degrees of periostitis.

143. Adult. The left tibia shows periostitis, in the form of shaft swelling and striations in the lower half of the tibia.

Two tibiae and two fibulae showing patchy areas of subperiosteal new bone along the shafts.

One femoral shaft (possibly from another individual) appears to be unusually bowed and deformed, with slight irregularity of the surface (suggesting an old inflammatory process).

Parietals show marked osteoporotic pitting.

A subadult skull shows reactions in the parietal area, in the form of pronounced osteoporosis and thickening.

One tibia shaft shows irregularity and pitting on the surface indicative of an active periostitis.

Subadult. Tibial shaft shows vascular lines possibly indicating very early periostitis.

Child. One humerus displays an exostosis, about 40 mm above the epiphyseal line.

Adults (parts of). Three tibiae show mild periostitis (as striations and subperiosteal new bone). Some healing is taking place. Again, this type of pathology could be associated with leprosy. There is also mild general vault osteoporosis.

Chapter Fourteen

THE ANIMAL BONES AND MOLLUSCS

K. KOSSWIG¹

THE ANIMAL BONES

THESE are mostly in very bad condition, probably because long bones would have been broken by the cook to extract the marrow and skulls similarly broken to extract the brain. Bones of sheep and goat are practically identical and thus are not separately identified; the same is true of cattle and water buffalo. Pig is present in Byzantine contexts but not in Turkish; Byzantine tusks resemble those of the wild boar and perhaps come from some primitive domesticated stock. The absence

of fish bones, particularly considering the common occurrence of marine shells (see below), is remarkable, but probably attributable to their poor survival-rate.

Dating

The date is that of associated pottery or other finds. R = Roman, B = Byzantine, T = Turkish, 10 = 10th century, 10-12 = 10th to 12th century, 10/11 = late 10th to early 11th century, 12 (+ T) = 12th with Turkish intrusions, $\frac{3}{4}$ 12 = third-quarter 12th century.

Table 1. Animal Bones at Sarāḫane

Box No.	Level	Date	Contents ¹
1-4	519	10(+e12)	C S P
5-7	536*	10(+12)	C S P
8	790*	10(111/e12)	D
9	701*	10+12(+R)	P
10	1425*	12	C S
11	1108	-12/13(+T)	C S P
12-16	553	e16	C S D F
17	1453	e16(+ 116)	C S
18-21	1412	m16	C S F
22	137	m17	C S
23	990	$\frac{1}{4}$ 17	C S
24-33	1268	m16	C S F
34-43	516	116	C S F

¹The following abbreviations are used:

S = sheep or goat

C = cattle or water buffalo

P = pig

D = dog

F = fowl (domestic chicken: *Gallus gallus* [L.])

THE CATALOGUES

Table 2. Molluscs at Sarachane

Box No.	Level	Date	Contents
1, 2	728*	10-11+ $\frac{2}{2}$ 12	O, M, C
3, 4	843*	10	M, O
5	701*	10+12(+R)	O, F, 1 Dosinia
6, 7	863*	10+12	M, F, O
8	861*	10+ $\frac{1}{2}$ 12/e 13	M, O, F
9	997*	12-13	M, O, C
10	700*	$\frac{1}{2}$ 12/e 13	O, C, 1 Helicella sp.
11, 12, 13	835*	$\frac{3}{4}$ 12	O, M, F, C, 1 Dosinia
14	739*	12-13	M
15	831*	$\frac{1}{2}$ 12/e 13	M, O, F, C, 1 Cassidaria, 1 Dosinia, 1 Cerithium
16	855*	$\frac{1}{2}$ 12/e 13	M, O, F, 1 Cassidaria, 1 Murex
17	830*	e 13	M, O, C, 1 Murex
18	858	11-12(+T)	M, O, F
19	738	12(+T-19/20)	O
20	740*	B-12	M
21	741	--	O, F
22	1003	12 + T	O, F
23, 24	859	$\frac{1}{2}$ 12/e 13(+18)	M, O, 1 Helix
25, 26	553	e 16	O
27	673	$\frac{2}{2}$ 16(+17?)	M, O, 1 Dosinia
28	991	16/e 17(+17-18)	O
29	988	B+16+18	O
30	665	B+16+18	M, O, C, 1 Helicella sp.
31	733	B(+T)	M, O, C
32	158	m 16	M, O
33	699	B+T	O, P
34	865	10-12(T-mod)	M, O, F
35	1207	18/e 19-mod	O, F
36, 37	834*	$\frac{2}{2}$ 12	M, O
38, 39	833*	m 12+	O, M, P, 1 Dosinia, 1 Cerithium

ANIMAL BONES AND MOLLUSCS

Box No.	Level	Date	Contents
40	702*	10 + e 12	O
41	694*	10-11 + e 12	M, O, 1 Murex
42	64*	l 16	M, O, 1 Helix
43	997*	12-13	O, 1 Helix

THE MOLLUSCS

THE FOLLOWING abbreviations are used:

- O = *Ostrea edulis* (L.); native, flat, or edible oyster
M = *Mytilus galloprovincialis* (Lam.); (Mediterranean) mussel
F = *Flexopecten glaber* (L.); scallop
C = *Cardium paucicostatum* (Sowerby); cockle
Dosinia = *Dosinia exoleta* (L.); Venus-shell or rayed artemis
Murex = *Murex brandaris* (L.); murex-shell
Cassidaria = *Galeodea echinophora* (L.); helmet-shell, prickly helmet
Cerithium = *Cerithium vulgatum* (Brug.); horn-shell, needle-shell
Helix = *Helix aspersa* (Müll.)
Helicella sp.

O, M, F, C, and Dosinia are bivalves. Murex, Cassidaria, and Cerithium are gastropods. Helix aspersa and Helicella sp. are land snails.

M, O, and F are sold today in the fish-market (*midye*, *istridiye*, and *tarak*), C (*acivades*) is rarer. Other species occurring in very small numbers were presumably caught by chance together with those above. The land-living individuals of two species are thought to have entered the archaeological debris at a later date.

One point of interest is that there is no difference between Byzantine and Turkish groups of edible mol-

luses, another is that all mussels are nicely cleaned: it may be inferred that throughout the whole period mussels were eaten only as *midye dolması*, prepared in the kitchens, for in their natural environment mussels are normally covered with the shells of many epoeious species, such as balanids (sea pocks) and worms.

The majority of mollusc groups have both oyster and mussel, and groups are either Byzantine to the early thirteenth century or Turkish from the early sixteenth. It is worth noting too that all stratified scallops are from Byzantine levels and that none is recorded from sixteenth- to eighteenth-century levels; the distribution of cockles appears to be similar. Most cockles and all of the scallops, murex, helmet-shells, and horn-shells are not found after the early thirteenth century; only oysters and mussels occur after that period.

The most common forms in the catalogue, the oysters, mussels, and scallops, are found in shallow waters; the latter two are attached to the substrate by a byssus. All could have been collected together. Two other forms, the cockles and Venus-shell, found buried in the sand, could also have been collected together. The seven gastropods (murex, helmet-shell, cerith) are all edible but may have been collected as beach specimens. Two of the forms present, the oyster and the helmet-shell, are today almost exclusively winter food. See Table 2.

Chapter Fifteen

THE CHURCH OF ST. POLYEUKTOS

R. M. HARRISON

THE PRINCIPAL objective of the excavation was to recover and record the surviving remains of Anicia Juliana's church. In this chapter some of the implications of the evidence so recovered are briefly examined. Sec-

tions on the topography, the architecture, the structural techniques, the sculpture, and the historical context may serve as the starting-point for more detailed studies by others in the future.

The Topography

THE CHURCH of St. Polyeuktos lay on the Mesê, the arterial street which in this sector ran in a generally north-westerly direction from the Forum Tauri (Beyazit) to the church of the Holy Apostles (Fatih) and thence to the Gate of Charisios (Edirne Kapı) in the Land Walls (see chap. 1, fig. A).¹ A straight line drawn between the Forum Tauri and the Holy Apostles passes just to the north of Polyeuktos, holding the higher ground and following more or less the same line as the modern main street Şehzadebaşı Caddesi;² there is good reason, however, to suppose that the Mesê did not here follow a straight line.

The crux lies in the situation of the Philadelphion, a place on the Mesê which it has recently been suggested lay near Bodrum Camii³ rather than at Şehzadebaşı (the traditional site).⁴ Persuasive evidence is the itinerary in *De caer.* 75-6 (ed. Bonn), where the Emperor, after stopping at the Forum Tauri and St. Mary Diaconissa, reaches the Philadelphion and then turns right, traverses *ta Olybriou* and *Constantinianae* to reach St. Polyeuktos and eventually the Holy Apostles. The right turn would be incomprehensible if the Philadelphion was at Şehzadebaşı. The Philadelphion, moreover, lay on the way from the Golden Gate to the Forum Tauri (*De caer.* 501-2; cf. 55-6), and that favours a southern rather than a northern situation.⁵

It has been shown above that St. Polyeuktos in antiquity lay on the southern slope of a ridge between Marmara and Golden Horn, as it does today. It has also been shown that it was adjacent to Anicia Juliana's palace, which probably lay on its northern side, that is towards or on the ridge. The complex of substructures

lying north of the atrium has a western wall that makes an angle of only 60° with its southern wall (see chap. 2, fig. B); the most probable explanation for this oblique end to the building is that it was determined by the line of an earlier street.

Running just north of the ridge is the Aqueduct of Valens, which was built in 368 (see chap. 1, fig. A). Its eastwards alignment is approximately 30° greater than that of St. Polyeuktos, and a perpendicular drawn south from the Aqueduct would thus be approximately parallel to the church's oblique western wall (cf. chap. 2, figs. A and B). We may suppose that there was some earlier street-system on this alignment west of the church.

That there was a route in the Roman period along the ridge north-westwards from Beyazit seems likely in view of the evidence for a Roman cemetery extending from Beyazit to Saraçhane.⁶ There is no evidence, however, for a major route on this line between Saraçhane and Beyazit in the Byzantine period, and the Şehzadebaşı Caddesi seems to be a fairly recent development.⁷

If, as seems to have been the case, the Mesê followed a southerly route to the Philadelphion, its next stage, to the Holy Apostles via St. Polyeuktos, must have passed either to the east and north or to the south of St. Polyeuktos. One objection to the northern route is that it involves an awkward (and unattested) change of direction, another that no remains attributable to the Mesê were recovered from the underpass. The southern route is more direct and easier, but, converging on the line of the Aqueduct, it fails to account for the

oblique west end of St. Polyeuktos. Another factor is that the valley between the Third and Fourth Hills (that now traversed by the Atatürk Bulvarı) was steeper in antiquity than it now is,⁸ and one may ask why the Aqueduct and indeed the Mesê avoided the ridge unless

this had been preempted by some major construction. The balance of the evidence appears to favour a route past the church on its south side, but the argument is far from conclusive.

The Architecture

IT HAS BEEN SHOWN that the church was erected before the accession of Justinian, probably in the period 524–7. Its size and rich sculptural decoration mark it as a building of magnificence; but its architectural importance will largely depend upon what can safely be said about its elevation and superstructure. Did it, or did it not, have a dome?

In its simplest terms, the church in plan is square,

with an apse projecting to the east and a narthex added to the west (fig. A). Within the square are two huge broad foundations running longitudinally from west to east, dividing the building into, as it were, nave and aisles. The area allocated to the north aisle is occupied by two parallel barrel-vaulted passages, which would together have supported the aisle-floor; and a similar system would have obtained for the south aisle. In the

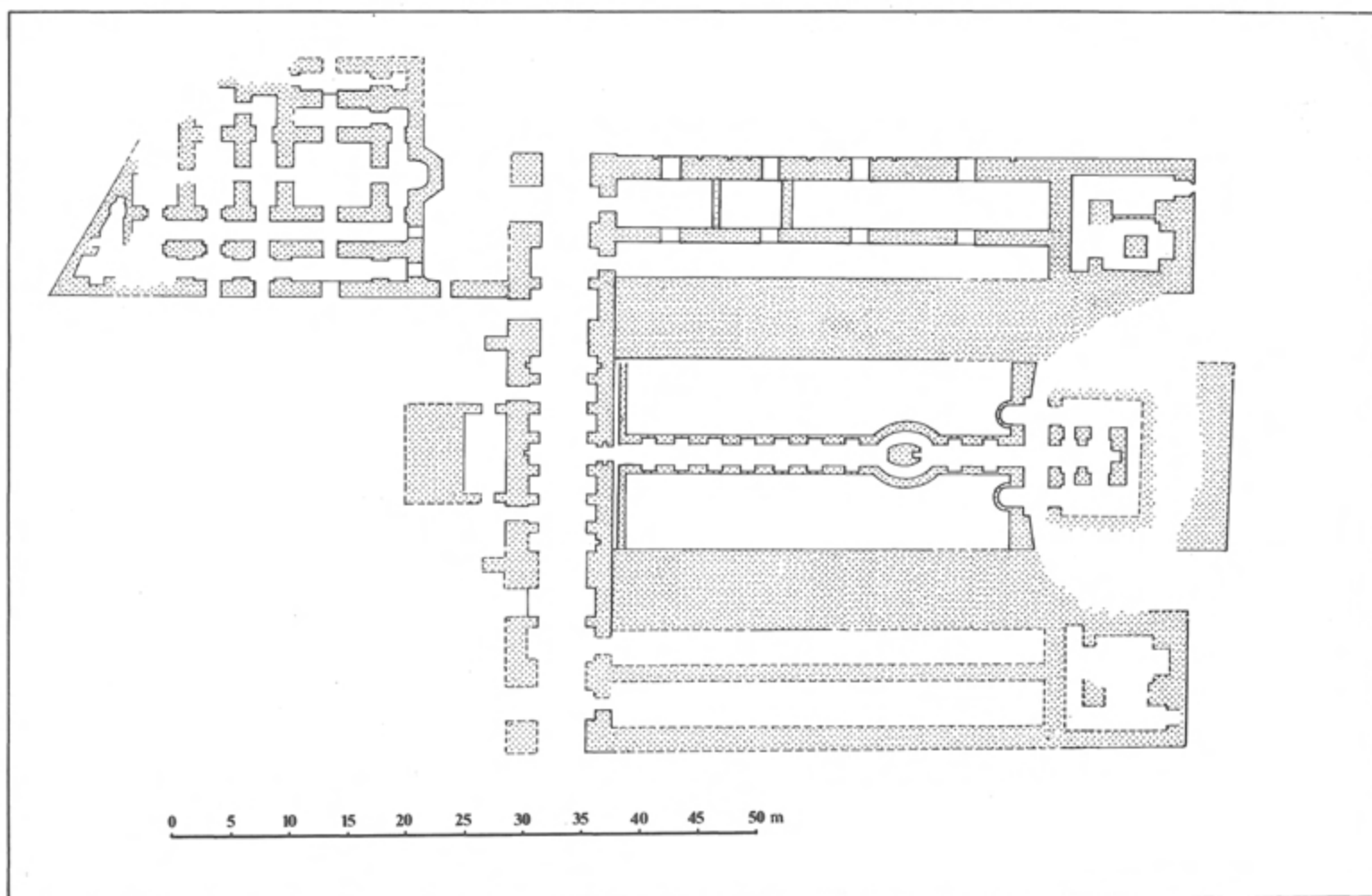


FIGURE A. Simplified Plan of Church Foundations

north-east and south-east corners of the building the substructures contained identical groups of chambers. The floor of the nave had been carried for the most part on solid packing, separated by an axial underfloor passage which led from the narthex-substructure to a rectangular crypt beneath the bema, dividing to pass an enigmatic elliptical core of concrete which lay at the exact centre of the square building and which must, to judge by its shape and position, have underpinned the ambo. The floor of the church was raised on massive substructures ca. 5 m above ground level and the atrium pavement.

We thus have a square plan with a central feature and with internal division into nave and aisles; we also have the deliberate elevation of the church-floor and the width and depth of the two gigantic nave foundations, which must have sustained *inter alia* the colonnades between nave and aisles.

To this simple plan of known dimensions must be accommodated the great inscription, which is recorded in *Anthologia Palatina* 1, 10, and of which lines 1-41 were stated by the scholiast to surround the nave (see Chap. 1 above). Seven large fragments of this inscription were recovered, three being from arches, two from niches, and two being corner-stones; the find-spots of five pieces are known, and all can be placed at particular points in the full text of the inscription. Blocks 1 a i (line 9) and 1 a ii (line 16) were found fallen in the axial passage, in P/15-16 and Q/16, respectively; blocks 1 a iii (line 25), 1 a v (line 30), and 1 a vii (line 32) were found in the north aisle, in S/13-14, R/13, and Q/13, respectively. (The contexts of blocks 1 a iv and 1 a vi, which had been turned up by bulldozer in 1960, are unknown). This neat clockwise lay-out makes clear that the inscription began at the east end of the south aisle and terminated either within or above the sanctuary. There is also a very small fragment (1 a x) of an arch or niche, which retains parts of three letters and must come from line 14 or 22.

Three blocks (1 a v, 1 a vi, 1 a vii) carry consecutive lines of the inscription (lines 30, 31, and 32) and must thus have been contiguous. The blocks are, in order, an arch, a niche, and an arch, and each of the blocks is concave in plan. They were evidently elements of a curvilinear open exedra ca. 6.50 m in diameter.

The vinescroll on the curving faces of these blocks is sinuous and naturalistic. It will be observed that on each of the two corner-blocks (1 a i and 1 a iv) one face carries this type of twisting stem, whereas the adjacent face is decorated formally with a lattice in whose interstices single vineleaves are placed alternately pendant and erect. The naturalistic face is slightly concave, the

other quite straight. There can be little doubt that 1 a i marks the left-hand springing of one exedra and 1 a iv the right-hand springing of another. Sufficient of the straight (left-hand) face of 1 a i survives to indicate that this is also the right-hand end of a very broad, shallow arch (or niche). It would appear that block 1 a iv marks the end of the exedra preceding that represented by blocks 1 a v, 1 a vi, and 1 a vii, and that 1 a i marks the beginning of the second exedra on the south side, opposite the penultimate exedra on the north side.

1 a ii (lines 15-16) is a niche, which we may presume to have been flanked by arches from the evidence of 1 a x (line 14 or possibly 22), which is curved; but the face of the niche is flat, showing that this was not part of a curvilinear exedra. 1 a iii (line 25) is an arch, presumably from the penultimate exedra on the north side.

We thus have, in the eastern part of the nave, two opposed pairs of exedrae, each pair linked by a low arch, which carries the inscription. In the western part of the nave we have an inscribed niche flanked by arches on the south side, presumably matched by a corresponding niche on the north side.

It will be seen on the plan that the eastern end of the nave is marked at substructure-level by a cross-wall, which probably also marked the line of the chancel-barrier above. This cross-wall lies 9.25 m east of the centre of the ambo-foundation which, as has been said, lay at the exact centre of the church. If the two pairs of exedrae are set centrally on the two broad nave-foundations, facing north and south, respectively, their faces (or chords) will each be ca. 9.25 m from the church's central axis. If each pair is centred on the ambo, there is scope for a central square bay of side ca. $9.25 \times 2 = 18.50$ m. It will be noticed that the combined lengths of the two exedrae (ca. 13.0 m) and their two outer ends (say 1.0 m) and the broad arch between them (ca. 4.50 m) also come to ca. 18.50 m and could thus be accommodated as the northern and southern sides of such a bay (fig. B). This bay would be defined by four piers, set on the massive foundations; this hypothesis would help to explain the extraordinary thickness and depth of these foundations, which would thus carry not only the piers but the deep exedrae between them.

If a central square bay is allowed over the east end of the nave, then there is room for a narrower bay over the western sector. One hypothesis is thus for a central dome with a cross- or barrel-vaulted western bay. There would be some similarities with Justinian's church of St. Eirene.

A dome, appropriate in sixth-century Constantino-

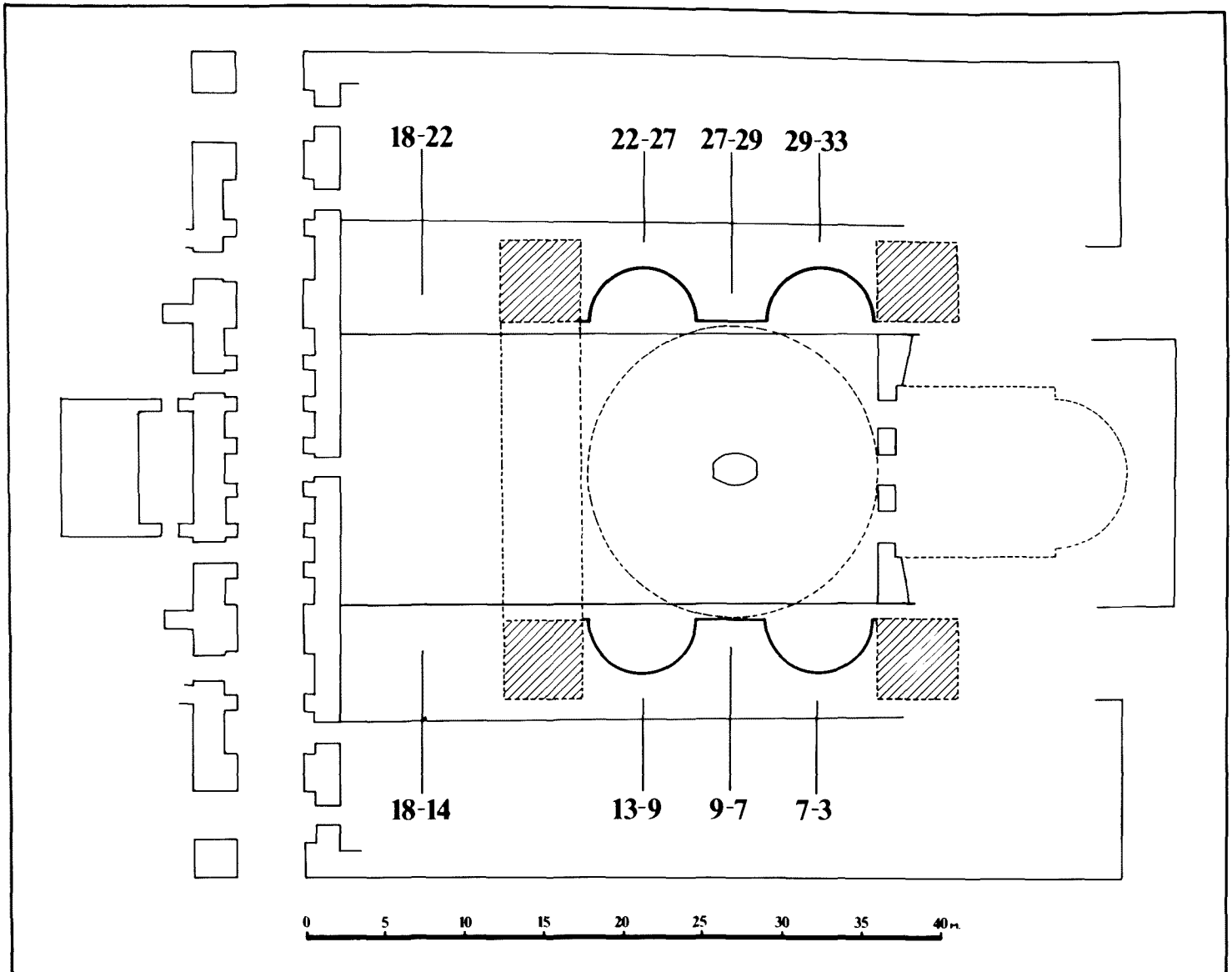


FIGURE B. Hypothetical Lay-out with Exedrae and Piers

ple, is suggested by the square plan, the massive character of the foundations, the presence of open exedrae,⁹ and perhaps by the epigram;¹⁰ that it was a central dome is suggested by the square plan and by the central feature (ambo?) at floor-level. This was, moreover, a very ambitious building, raised high on substructures in a conspicuous part of the city; it is evident that no expense was spared, and, in the decade before St. Sophia, a domed structure seems quite probable. Then, too, there is St. Sophia itself and the suggestion made elsewhere¹¹ that one of Justinian's main objectives there was effectively to eclipse the exuberant grandeur of Anicia Juliana's church; that suggestion would have

more force if the latter church was domed. Finally, Procopius, having described St. Sophia, appears to hint at the existence of St. Polyeuktos in his description of St. Eirene, which is of course also a domed church.¹²

What are the objections to the above hypothesis, and what the alternatives? It is easier perhaps to point to the former than to the latter.

An objection to the dome is that nothing attributable to one was recovered in excavation. Shattered brickwork, however, would hardly be recognized, even if the bricks had not been salvaged at an early stage leaving only mortar, or cleared in subsequent levellings of the general area of the nave. Fragments of a marble

cornice might be expected; but (a) only about 5 percent of the inscribed entablature was recovered and a cornice might be as vulnerable or even more so, and (b) SS. Sergius and Bacchus is one example of a subsequent dome that did not require a cornice. Only the second dome of St. Sophia is known to have had a cornice.

Another objection to our proposed reconstruction is the interruption of the great inscription, which is broken both by the principal piers and by the west wall of the nave. It might, however, be pointed out that the inscription occupied (as it does in SS. Sergius and Bacchus) a continuous frieze of the entablature, and that in St. Sophia the equivalent elaborate entablature crowns the principal colonnades and those of the exedrae, being broken both by the principal piers and by the west wall.

A third objection is that there are no massive ties in the foundations on the eastern and western sides of the proposed central square bay. Too little is known, however, of the foundations of St. Sophia and of other sixth-century domed churches for us to suppose that such ties were ever thought to be necessary. If a dome's lateral thrust were to affect its supporting piers, this would be in their upper parts requiring buttresses, whereas the foundations might simply need strengthening to carry dead weight. The thickness of the longitudinal foundations was partly to provide this dead-weight support, partly to underpin the intervening broad exedrae. The central tower of York Minster has been found to have no transverse ties.¹³

The real problems occur not in the plan but in the elevation. Exedrae are attested by the epigram (line 58, *κόλποι δ' ἀμφοτέρωθεν ἐν ἀψίδεσσι χυθέντες*), and so are galleries (line 56, *κίονες ἀρρήχτοις ἐπὶ κίοσιν ἑσθηῶτες*). The exedrae were presumably of two storeys. On the hypothesis of a square central bay, the four masonry piers defining that bay would have supported four great arches, one across each side of the square. The northern and southern arches would each either have been filled by a tympanum (like St. Sophia) or developed into a barrel-vault (like St. Eirene). If the former, we should expect each exedra to have carried a semidome whose crown lay below the chord of the tympanum; if the latter, then each exedra was probably capped at the level of the springing of the vault by a freestanding and probably fanciful entablature, perhaps resembling that depicted in the mosaics of St. George in Salonika. On either system, the eastern and western arches would have opened into barrel-vaults running down to a wall-top approximately level with the chords of the lateral arches; if the latter also opened into

barrel-vaults, there would have been both inside and out a cruciform scheme around the dome.

The two piers in Venice (6 a i and 6 a ii) have each a height of 4.01 m. Their capitals (5 a ii and 5 a iii) are each 0.97 m high, including the impost (whose carving at least is medieval). At Saraçhane a capital of the same type (5 a i) has a height of 0.90 m, including a plain impost. An engaged pier-capital (5 a iv) and a pier-capital (22 d i) both lack imposts and have heights of 0.76 m and 0.82 m, respectively. It is clear that these five capitals, some with imposts added separately, are part of one series. The series includes two pilasters (6 a iv and 22 e i).

The palm-tree pier-capital (5 b i), which lacks an impost, has a height of 0.93 m; it is considerably broader than the others and stood on a correspondingly broad pier, which may also have been correspondingly taller. The column-capital in Barcelona (3 d i) is also 0.93 m high. The basket-capitals (3 a i and 3 b i) are much smaller and will be discussed below.

The palm-tree capital and the fragment of its pier were found close together in the axial passage with a corner-block of the inscribed entablature (1 a i), which it is clear that the capital supported. The capital, which may in addition have had an impost, has an upper surface that measures 1.30×1.33 m, while on the underside of the inscribed block is a dowel-hole that is 0.55 m from each of the decorated sides, implying a capital (or impost) broader than 1.10 m; the dimensions thus correspond, and perhaps we should put here the sprig-and-leaf impost (2 d i). If the pier, which was 25 percent broader than the Venice piers, was also 25 percent higher, its height was ca. 5.0 m; the capital would have raised this to nearly 6.0 m and the entablature to ca. 7.50 m. Allowing for a cornice, we may suppose that the gallery-floor was more than 8.0 m above that of the nave.

Each exedra incorporated five entablature blocks, two of them at the corners and three supported by two columns. The Barcelona capital (3 d i) is an obvious candidate for these exedra-columns; its base-diameter of 0.57 m would allow a ratio between base-diameter and height of about 1:8, or less if there were a raised base. A series of massive footings with circular sinkings (7 a i–7 a ix) may imply that there were no bases.

Basket-capitals 3 a i and 3 a ii, which are 0.695 m and 0.59 m high, respectively, can probably be assigned to the gallery. Whether the Venice piers and the others of that series should also be assigned to the gallery is uncertain; other putative locations at ground level might be behind the exedrae, to help carry the

aisle-vaulting, or in the exedrae of the western bay. Whether or not these piers stood in the gallery, we may assign ca. 6.0 m to its columns and entablature, and 3.50 m to the exedra semidomes. Allowing a height of 10 m for the four great arches, we may say that, if there was a dome, its seating would have been nearly 30 m above the nave-pavement and its crown some 10 m higher.

The principal difficulties with the above are that a curvilinear entablature may be thought to sit rather awkwardly on a square pier-capital (or its impost), and that, if the exedrae sprang from the main piers carrying the dome-arches, then unless those piers were irregular in plan, they would have tended to block the lateral openings of the exedrae. This was, however, on any reconstruction a highly idiosyncratic church built on a large scale and at speed; it would be surprising if there had not been some awkwardnesses.

As for an alternative scheme, the ground-plan is basilical, and it is theoretically possible to produce a scheme whereby two-storeyed articulated colonnades, presumably punctuated by masonry piers, supported vaulting of uniform height over the nave. The linking of the first and second exedrae by an arched entablature, however, is certain, just as it is certain that there was no such link between the second exedra and the rectilinear bay that followed it. A square central bay centred on the ambo-foundation seems inevitable, and, if the nave colonnades included masonry piers, then there was no room for a western bay of similar dimensions. Furthermore, the square plan and central ambo suggest a centralized scheme; but, without a central dome, both features appear to be without point.

One category of evidence, which might be thought to favour an alternative scheme, is the drainage (discussed further, below). There were down-pipes in the inner faces of both walls of the narthex-substructure in its central sector. Those in the outer wall clearly carried water from the roof of the narthex, but what of those in the inner wall? If they performed the same function (and it is not easy to see how they could have had any other), the narthex-roof in this sector must have had a valley and externally visible vaulting rather than a single pitch. Similarly, the water-channels, which run westwards within the inner faces of the great nave-foundations, were presumably fed by down-pipes in the principal piers. Why was this water not shed laterally? A system that involved valleys between the nave-roofing and that of the aisles (between barrel-vault and subsidiary vaults?) seems likely. This would

be the case if there were a central dome, as proposed above, with barrel-vaults running east and west, and subsidiary externally visible vaulting above the aisle-galleries. Whether or not there were vaults running north and south from the central bay would be immaterial.

Although the evidence is not conclusive, what there is all seems to point to a central dome. Such a dome would have been ribbed and of light brick, and it may even have been supported by pendentives carrying a circular cornice. The occurrence of triangular pendentives at Karabel and Alacahisar in Lycia, which are almost certainly to be dated early in the reign of Justinian, strongly suggests that true pendentives were already current in the provinces before Justinian;¹⁴ and indeed they do occur on a very small scale over a century before, at Abu Mina in Egypt.¹⁵

The combination in one building of longitudinal and vertical axes had been achieved in Isauria under the patronage of the Emperor Zeno (474-91).¹⁶ The East Church at Alahan has over the eastern part of its nave a tower with squinches, which carried a timber roof.¹⁷ This combination of axes may be seen as one stage in a development which began in the provinces and which was later to appear in Constantinople.

Finally, some consideration must be given to the unit of measurement employed in the church's lay-out and construction. Attempts to resolve lateral and diagonal measurements in round numbers of various kinds of foot were unsuccessful. What appears to be the solution was only found as this report was going to press; the implications will be more fully examined elsewhere. Application of the long or royal cubit, whose length is generally agreed to have been ca. 0.515-0.52 m, would give exactly 100 cubits for the length and the breadth of the church.¹⁸

Now, *Anthologia Palatina* 1, 10, line 48, claims that Anicia Juliana by her church surpassed the wisdom of Solomon, and it so happens that the long cubit was the unit that had been employed for the construction of Solomon's Temple. Moreover, the Temple of Ezekiel's Vision is stated to have been precisely 100 cubits long and, including the platform upon which it stood, 100 cubits wide. The hypothesis that St. Polyeuktos was deliberately modelled on descriptions of the Temple is reinforced by the fact that decorative features of the Temple (palm-trees, capitals like lilies, capitals festooned with network, pomegranates, and open flowers) are all prominent in the repertory of St. Polyeuktos. It seems likely, moreover, that other distinctive

features of the church will eventually be explained by reference to the Temple. The purpose of this extraordinary initiative was presumably to stress the royal line

and claims of Anicia Juliana by clear reference to Solomon, who was the anointed king *par excellence*.¹⁹

The Internal Arrangements

THE NAVE, some 18 m wide and 34 m long, was evidently defined at its eastern end by a chancel-barrier supported by the transverse substructure-wall, which also formed the western wall of the crypt (fig. B).²⁰ In the eastern part of the nave, at the exact centre of the building and directly beneath the putative dome, was the ambo, as inferred from the location and elliptical form of the foundation.²¹ Beneath the nave and along its axis ran a passage, which, widening at the centre of the church to enclose the ambo-foundation, originally connected the narthex-substructure with the crypt; the passage was at an undetermined (but perhaps early) date bricked up at both ends. The elliptical foundation has in its eastern end a carefully constructed slanting recess or slot, as if for a chute or ladder, suggesting that there may have been access from the ambo to the passage.²² The passage had a good floor around the ambo but none in its western sector, where church destruction debris directly overlay dark clay. The crypt consisted of a central room of two bays paved and revetted in marble, surrounded by an ambulatory passage with a tile floor. There would have been direct access to the crypt from the sanctuary above by staircases to north and south.

The inlaid columns (4 a i–4 a viii) are good candidates for the ciborium.²³ For the chancel-barrier, an affair presumably of plinths, posts, and screens, perhaps with colonnettes, entablature, and even marble icons, there are very many eligible fragments, none of which is conclusive.²⁴ Plinths include examples in *verde antico* (11 y i, 11 y ii), posts examples in alabaster (14 c vi),

and screens the elaborate series in Dokimian marble (13 a i) and pierced examples in Proconnesian (13 c i–13 c iv). There are many fragments, too, which might be attributable to the ambo, to the solea, and to screens at gallery-level. The church is known to have had galleries, and it may be assumed that the north and south galleries were linked, as in St. Sophia, by a gallery over the narthex; corroboration is provided by the brick-pier found fallen in the atrium, which from its position as fallen is attributable to the upper storey of the outer wall of the narthex. The northward extension of the narthex substructure probably represents an external stair or ramp giving access to this gallery.

At the eastern end of each aisle there was, at substructure-level, a complex of chambers that would have supported either a similar complex or a single large room. Other Constantinopolitan churches of the Early Byzantine period have large doorways in this position, but no evidence was found for the external staircase that would have been needed for access to such a door at this high level. It has been suggested, on the analogy of St. Sophia, that this complex may have accommodated a staircase to the gallery; but St. Sophia's eastern staircases were external, and internal staircases do not seem to have occurred in Constantinople at this period. Another possibility is that large north-eastern and south-eastern rooms may, together with the bema, have constituted a triple sanctuary of Syrian type, although admittedly there is no other example of this in Constantinople either.²⁵

The Atrium and North-western Complex

THE PRINCIPAL approach to the church was evidently by the atrium, where a broad staircase on the axis of the church gave access to the narthex, whose pavement was some 5 m above that of the atrium. The width of the atrium was 27 m, its minimal length 39 m; the width of the church was 52 m, its length (excluding the apse) 51.45 m. The atrium was evidently planned to be half the width of the church and half (or more) as long

- again as its own width. On the north side it was overlooked by an elevated terrace, on which stood a building with an eastern apse and (at substructure level at least) an ambulatory enclosing a room that was nearly square. At the centre of this room was a curious feature comprising four close-set piers around a circular shaft, which may have been connected with the drainage-system. This central feature helped to carry the barrel- and

cross-vaults of the room, which were, however, at a lower level than those of the surrounding ambulatory.²⁶ The building would appear to have been a baptistery, the four piers supporting a large font, which had been sunk into the floor of the room above and which had a central drain. This explanation fits all the facts; other explanations, that the central feature might, for example, have supported a sarcophagus or some reliquary-structure, satisfy only some of them. The building was probably surrounded by a terrace with

high-level access to the northern end of the narthex. If Anicia Juliana's palace indeed lay on this northern side, there may have been direct access from the *piano nobile* level of the palace to that of the church.²⁷

The oblique line of the western wall of the northwest complex was presumably determined by an earlier street-system. Internally at least, the western end of the atrium was probably quite regular in plan. It may have incorporated an elaborate gateway.²⁸

Building Materials and Methods

THE PRINCIPAL building materials of early Constantinople—dressed stone, brick, and mortared rubble—were all, of course, used for the church. Building methods in the city were conservative, and, details of plan and elevation apart, there was little in the church's structure that was remarkable except its scale.²⁹ Two principal varieties of stone were used, a grey limestone and the stone that is generally known as 'greenstone'; entablatures, string-courses, capitals, some piers, and at least some columns were of Proconnesian marble. There were, moreover, two principal varieties of brick, those of what may be termed standard size being used in the main walls and smaller, lighter bricks used chiefly in the vaulting and also in some subsidiary walls. Mortared rubble was used for the filling of walls, and in particular for the two massive foundations separating nave from aisles and for the apse platform; the hardness of this mortared rubble was demonstrated in 1965 when the apse-platform was finally incorporated into the underpass retaining wall (where it can still be seen) after long and valiant attempts by municipal bulldozer to demolish it. The mortar used for brickwork, however, was often very friable, particularly in the vaults.

It will be convenient briefly to review the materials, before discussing their combination and use:

Marble. This appears to have been entirely Proconnesian, other varieties being used only for furnishings and revetment. There is some doubt whether the granite columns found lying on the site and catalogued above (chap. 5, 4 c i-4 c ix) should be attributed to the church; the excavations did yield some column-fragments of Proconnesian marble (chap. 5, 4 b i-4 b viii). Except for narrow string-courses at the springing of substructure-vaults, marble was only used at and above floor-

level, where it could be seen. Structurally it was used for columns, bases, capitals, piers, entablatures, and string-courses; the accuracy with which it could be worked meant also that it was used for door- and window-frames and for some purely decorative features. The majority of structural blocks will have been cut to order and at least roughly shaped in the quarries for completion on site; only certain furnishings, such as parapets and some screens, will have arrived ready made.³⁰

Limestone. This is presumably all local. It is used in various ways and probably comes from various quarries. First there are the large, irregularly shaped blocks used as a foundation-course, the upper surface dressed flat and with slots for dovetail-cramps. A second use of limestone is as small, squared blocks laid in regular courses as a facing alternately with bands of brickwork. Thirdly, it is used as a facing in rough, less regular courses without brickwork, and finally it can be uncoursed, rough stones simply being used to revet a foundation-trench before the addition of mortared rubble.

Greenstone. This distinctive stone, a sort of disintegrated granite, is also local. It occurs as large carefully dressed blocks laid in single courses in brickwork.

Brickwork. This was used in bands as a levelling course, alternating with stone-faced mortared rubble, for the fabric of the wall itself, and for vaulting. Standard bricks are ca. 0.37 m square, ca. 0.045 m thick, although measurements vary considerably; in the vaults and one surviving upper-storey pier they tend to be somewhat smaller and lighter; in the niches of the axial passage beneath the nave they are only 0.22 m square and 0.025-0.03 m thick. The mortar is very liberally applied, in beds which are generally at least as thick as

the bricks; ten courses of standard brickwork are 0.95 m-1.0 m high. The mortar is white or pinkish, usually with a high percentage of crushed brick, and a harder mortar, preserved in the vaults of the north-eastern sector, was applied as pointing. The brickstamps are described and discussed above (chap. 10).

Mortared Rubble. The term 'mortared rubble' is used here instead of 'concrete', following J. B. Ward-Perkins, who observed in his classic account of the building methods of Byzantine architecture that this material "lacked the tensile strength and consistency of Roman concrete, and was rarely used as a material in its own right in cases where heavy loads or stresses were involved."³¹ Nonetheless, the mortared rubble in the foundations of St. Polyeuktos was generally extremely hard.

Wherever they were examined, foundations were found to have been cut deep into the underlying natural sand. A trench with vertical sides was revetted with irregular stones and infilled with mortared rubble. In S/12 the foundations penetrated 3.50 m below sixth-century ground level. Whether or not there had been wooden shuttering was not determined.

In the narthex these foundations carried at ground level a broad levelling course of large, irregular, dovetail-cramped blocks. The corresponding course in the church's north wall is set some 3 m higher, for the ground sloped steeply from the north; on its outer face this course was indeed at ground level, on the inner face it served as the springing for brick-vaulting over the northern of the two passages that supported the north aisle. At approximately the same level (and serving on one side as the springing of the adjacent aisle-vault) a similar course of cramped blocks ran right through the great foundations on each side of the nave and, to judge by the impressions of blocks in the area surrounding the crypt, right through the apse-platform.

In the walls of the church and great nave-foundations, these blocks served as the footings for walls of mortared rubble faced with small squared blocks alternating with bands of brickwork; in the outer wall of the narthex they carried brickwork with two courses of 'greenstone' blocks; there was also a course of 'greenstone' blocks in the inner wall of the narthex.

Brick vaults sprang either from the large course of cramped blocks (as in the north aisle) or from a narrow chamfered string-course of marble (as in the narthex and the square room of the north-eastern sector). Use was made of the arch, the cross-vault, and the barrel-

vault. In the narthex and aisle-passages barrel-vaults were constructed of bricks laid radially upon a timber framework in the normal manner; in the much narrower east-west corridor in the north-eastern sector the barrel-vault was constructed of pitched bricks, a technique that does away with the need for timber centring.

From the upper storey, one brick-pier was found in the atrium as fallen. Its surviving height was ca. 10 m, and it is notable for having ca. 30 courses of brick between two projecting cornices, upon the lower of which was a rectangular slot through the brickwork, evidently for a tie-beam.

There are putlog-holes, generally roughly hacked and of hemispherical form, inside the narthex-substructure. There was no evidence in the church's foundations either for vertical stakes underpinning mortared rubble or for timber-lacing, which were both regular practices in Ottoman times.

Dovetail-cramps were presumably of wood. The slots were empty, even beneath brickwork in bb/15 which was deliberately demolished during excavation. Also of wood would have been the dowels set into square sinkings in the top surfaces of piers and capitals, matching similar sinkings on the underside of capitals and entablature.

The roofing of the nave would have required a forest of timber-scaffolding, which would then have served as platforms for mosaicists, sculptors, and those affixing the marble revetment and any suspended lamps and other hangings. Such lofty scaffolding would have required firm underpinning, and this may explain the temporary paving whose traces were found below the floor of the nave, in NO/14 and O/15.

Finally, the builders paid particular attention to drainage. Large brick-vaulted drains ran south beneath the floor of the narthex-substructure, fed by a brick-vaulted drain that ran along the outer face of the church's north wall and into which a number of down-pipes discharged, down-pipes in both inner walls of the narthex, and a drain from the western end of the axial passage, which was fed by two down-pipes within the church's west wall and, within the inner faces of the great nave foundations, by two channels which then turned inwards against that west wall. Down-pipes were set in carefully constructed wall-slots; only the 'greenstone' blocks were laid across the slots and subsequently pierced. This careful provision was to carry away water from the roofs. The drains running westwards in the nave were presumably fed by down-pipes within the principal piers. As suggested earlier, this

probably implies that there were valleys between the roofing of the central part of the church and its edges. Another unresolved problem is the form of these outer edges, which will presumably have carried a *sima* to

channel rainwater into the down-pipes. Where the waterspouts (20 a i and 20 a ii and perhaps others) fitted into the scheme is uncertain.

The Sculpture

THE ARCHITECTURAL sculpture was remarkable for its novelty, variety, abundance, and technical quality. With very few exceptions the material was Proconnesian marble, which arrived for the most part in roughly shaped blocks. New quarries would have been opened for the purpose, material would have been shipped in unfinished state, and its carving would have been done on site and, in the case of the more elaborate pieces, when the blocks had been hoisted into their final position.³²

We may disregard the *Patria*, which states that the sculptors came from Rome.³³ The marble is Proconnesian, and the quarries of Proconnesus had for centuries supplied Constantinople, the quarry-workers and sculptors building up traditions and technical expertise in their conservative craft.³⁴ There is no need to invoke an influx of craftsmen from abroad to explain the novelty and variety of sculptural motifs, which may rather be attributed to the clear specifications of an idiosyncratic patron. Similarly, the extraordinarily high technical calibre, exhibited, for example, in the twisting vinestems and in the underdrilled capitals, is no more than simply the best Constantinopolitan craftsmanship that money could buy. The work, moreover, was completed at high speed, and the ability to produce under these conditions underdrilled lattice-work of the calibre of capitals 3 a i and 3 b i shows an absolute mastery of this particular marble and of its precise tolerance, which points to local workshops.

Technically, the sculpture is of the highest order, remarkable as much for its underdrilled lattice- and strap-work and for exuberant vegetation virtually detached from its background, as for the carefully carved and delicately chiselled vineleaves and the superbly modelled peacocks, which are practically in the round. The workmanship is nowhere hesitant or painstaking; rather, it conveys the impression of mastery and swift and confident execution, as indicated particularly by marks of the chisel, by small irregularities, and by the springing line of lattice-bars, which are not strictly rectilinear but deftly carved by eye.

Characteristic of the carving are the broad, naturalistic vineleaves, their edges underdrilled at an angle of

about 45°, their veins carefully cut in shallow relief, and in certain cases a merging by some leaves into the background in an illusion of a second plane reminiscent of the Ara Pacis. Characteristic, too, are the thick twisting vinestems with cicatrices and the underdrilled detached lattice, in one case (3 a i) with the oxidized tips of several iron drill-points (diam. ca. 0.002 m) broken off and embedded in the marble.

The sculpture had originally been painted. Traces of bright blue pigment remained on the background to the letters of the great inscription (1 a vii), behind the lobes of the shell and in the surrounding penannular groove of one of the cornices (2 c i), and in the lobes of a "leaf" on another cornice (2 d i). There was no trace of other pigments, or of gilding, although mention may be made here of the polychrome inlay of certain columns (amethyst, green glass, and gold glass), and what is thought to be the green-glass eye of a peacock (see small-find 729, above). Add the wall-revetment of many colours, the elaborately inlaid wall-panels, the mosaic in the vaults, and metal ornaments (including suspended lamps and whatever hung from an eagle's beak), and the effect must have been richly colourful indeed.

How far Anicia Juliana was able to draw on existing workshops already producing sculpture of comparable scope and quality and how far St. Polyeuktos was itself the formative major contract that created a school is not known. The specifications were very distinctive, the technical quality consistently high, the programme huge, and its completion extremely speedy. A vast body of sculptors must have been assembled for upwards of two years, and they were clearly well trained and closely supervised. We may suppose that many of the men who joined the enterprise as apprentices emerged within three years as masters.

It seems likely that for two or three years the construction of St. Polyeuktos absorbed the best sculptors available. When the job was finished, most probably in 527, the work-force would have come on to the market, becoming available to Justinian and Theodora. It is probable that some of the men were deployed on the sculptural decoration of SS. Sergius and Bacchus³⁵ and

some again in 532-7 on St. Sophia. Both churches exhibit some sculptural links with St. Polyeuktos, although both are more restrained in style and in many respects more conservative in repertory. Some men will have worked on other buildings in the city (a remarkable pair of capitals found recently at Ayvansaray springs to mind),³⁶ and others, particularly perhaps those most adept at the more exuberant and exotic motifs and the undercut interlace, which are the hallmarks of St. Polyeuktos but which were out of fashion in the capital a decade later, will have executed commissions for the provinces, where some culture-lag might be expected.

Although very little is known of the organization of marble workshops in the Early Byzantine period, what evidence there is points to continuity of practice from the Roman. One of the most exciting developments in Roman archaeology in recent years has been the demonstration of quarry-techniques and the mapping of overseas markets for the products of particular major quarries.³⁷ It has, for example, been shown that in addition to the export of simple blocks, there was on the one hand mass-production of standard items and on the other the execution of special, more elaborate commissions, and that in both these latter categories material was exported in roughed-out shape, to be completed at its destination.³⁸

The church of S. Vitale at Ravenna and the Basilica Euphrasiana at Poreč (Parenzo) both have Proconnesian capitals of St. Polyeuktos' split-palmette type, with elaborate undercut interlace.³⁹ Were they shipped as finished articles, or in roughed-out form for completion on site? If the former, where was the work done? If on the island of Proconnesus itself, it must be said that recent detailed survey of the quarries has produced no reject-pieces of this calibre to indicate such workshops there. If at Constantinople, why load and offload the marble cargo twice? As the shipment of roughly dressed pieces for completion at destination was the normal practice, as there is evidence that this practice was observed in the case of St. Polyeuktos, and as the problems lay in the loading and unloading of a ship, not in the length of its voyage, it is more reasonable to suppose that Constantinopolitan sculptors accompanied their cargoes to Ravenna and Poreč (Parenzo), respectively.

S. Vitale was begun by Ecclesius, who was bishop from 521/2 to 531/2 and who is depicted as founder on the mosaic in the apse.⁴⁰ Although it was not completed until 547 or 548, the capitals are those of the main order and should belong to an early stage in the

construction. Some at least of the St. Polyeuktos sculptors thus evidently worked in Ostrogothic territory, for Ravenna was not conquered by Justinian until 540. It is recorded that Bishop Ecclesius visited Constantinople in 526,⁴¹ and we may suppose that in 526, after two years of construction, the shell of St. Polyeuktos was complete and the programme of interior decoration already in full swing. We may then, perhaps, suppose too that Ecclesius visited the building-site at Saraçhane, where the best sculptors were hard at work, and discussed there the possibility of a commission to follow that of St. Polyeuktos. The team, which it is suggested went to Ravenna, appears moreover to have travelled farther afield in the Ostrogothic kingdom, to judge by a series of bird-protome capitals of Proconnesian marble in Ravenna⁴² and Poreč⁴³ and from Salona,⁴⁴ which show striking similarities to the peacock-bodies of St. Polyeuktos.

Sculptural motifs at Saraçhane ranged from the most classical to the most exotic, sometimes in juxtaposition on the same block, sometimes too in combination in the same design. The irregularly twisting vine-stem within each exedra had underdrilled leaves delicately modelled with raised veins, some leaves merging into the background to suggest a third dimension. This extraordinary naturalism is in the mainstream of Hellenistic and Roman tradition, as illustrated, for example, by carving at Pergamon,⁴⁵ the Ara Pacis at Rome,⁴⁶ the Temple of Hadrian at Cyzicus,⁴⁷ and a piece in the Lateran Museum usually attributed to the third century.⁴⁸ A comparison between the Hadrianic work at Cyzicus, which is of course also in Proconnesian marble, and that of St. Polyeuktos brings out the relative clumsiness of the former and the artistic and technical excellence of the latter.

The twisting vine-stem was set above the great inscription, but only within the exedrae; on the straight elements of this entablature the inscription carried above it an undercut diagonal lattice, in the interstices of which were set alternately pendant and erect vine-leaves, each naturalistically carved but each now set within a formal scheme. Similarly, each marble pier exhibited on two opposed faces a formal scheme, wherein a large pendant vine-leaf was suspended above a circular monogram, while a similar vine-leaf rose beneath it; both were carved with great naturalism but both sprang from a split stem, which formed regular rinceaux up the sides of the panel, with smaller, carefully arranged vine-leaves and bunches of grapes set alternately. On the two other faces of each pier, two twisting vine-stems with naturalistic leaves and bunches

of grapes grow up from an elaborate cantharus, uniting at the top of the panel to produce, incongruously, a ripe pomegranate.

Although other recognizable plant-forms in the St. Polyeuktos repertory are less naturalistically represented, a degree of naturalism in detail and perhaps also in lay-out may be recognized in treatment that is otherwise conventional. This is true of the acanthus leaves of capital 3 d i, both in the detail of their modelling and in their balanced but slightly irregular display; and it is true too of the ivy leaves (but not of their strictly controlled stems) and of the bunches of dates (but less so of the date-palms from which they hang) of pier-capital 5 b i.

Each exedra accommodated five large peacocks, their tails outspread, their bodies, necks, and heads carved in the round, their feet on short pedestals in high relief. One bird set frontally occupied the central niche, while two faced each other across each of the flanking arches, the tail-feathers rising to the crown of the arch to touch the headcrest. Each peacock had a necklace in low relief, there is evidence that the eyes may have been of green glass, the marble was probably richly painted, and a chain may have been suspended from the beak. Whatever the precise details of embellishment, the nave was, on our reconstruction, bordered by fifteen such fowls on the north side and fifteen on the south.

Earlier examples of sculpted animal- and bird-protomes occur in oriental contexts, at Persepolis,⁴⁹ for example, Hatra,⁵⁰ and Baalbek.⁵¹ Perhaps the most remarkable occurrence of peacocks carved in the round is at Memphis in Egypt, where a pair carved in limestone adorned the Hellenistic *dromos* to the so-called Serapeum, their tails outspread, rising from a bed of twisting vinestem, and their bodies each straddled by a figure of the young Dionysus.⁵² Under the Roman Empire, the peacock appears to have had, in a funerary context at least, connotations of immortality and the life hereafter; at a more elevated level, it was the bird of Juno (Hera), the Empress, and the moon, the counterpart of the eagle, which was the bird of Jupiter (Zeus), the Emperor, and the sun. The peacocks here, and those that appear so prominently in the Vienna Dioscorides which she commissioned, may simply allude to Anicia Juliana's imperial lineage. The proud language of the great dedicatory poem makes it clear that St. Polyeuktos was to be viewed as a dynastic monument: there are repeated references to Anicia Juliana's royal forebears, and prayers are invoked not only for her, her son, and her son's children (lines 37-39), but for generations unborn (line 76) and the fami-

ly's perpetuity (lines 40-41). That the peacocks may also represent the cherubim of Solomon's Temple, as suggested above (note 19), does not invalidate this interpretation.

In addition to the peacocks, there was at least one eagle, attested by a fragment of stiff, straight feathers, entirely different in their deep-drilled separation-channels from those of the peacocks, and by a hooked beak, which was pierced for something to be suspended from it. Where the eagle was set in the building is not known, and neither is it known whether the bird had here any imperial or other significance. Three small birds, evidently from an inhabited scroll of what were probably vinestems, simply show the use in St. Polyeuktos of a traditional Hellenistic and Roman device for enlivening acanthus and grapevine decoration.

On the exterior of the church, waterspouts were zoomorphic, carved in one case with the head of a lion, in another (more surprisingly) with the head of a boar; a series of waterspouts in the Istanbul Archaeological Museum, which may have come from St. Polyeuktos but in any case is relevant evidence of Early Byzantine sculptural caprice, includes a goat, a cow, and something that may have been intended to represent a crocodile. All the above-mentioned birds and animals, except the lion, which is conventional, and the crocodile (?), which is crude, were carefully and naturalistically carved.

In contrast to the identifiable plants, birds, and animals is an extensive range of stylized plants, palmettes, and other devices, which are clearly exotic and in the main derived from Sassanian Persia.⁵³ These include the two kinds of palmette, on the modillions and corona, respectively, of cornice 2 a i; the palmettes and feathery splayed leaves, again on modillions and corona, respectively, of cornice 2 b i; and the feathery splayed leaves, delicate and symmetrical, of the main panels of pier-capital 5 a i.

The fanciful nature of plants in this category may be illustrated by wall-panel 15 d i, where a central stem crowned by a small egg-shaped flower above three pellets rises from a simple three-lobed leaf resting on three more pellets. This stem is flanked by two graceful feathery leaves, which spring not from the base of the main stem, but from the lateral lobes of the base leaf. These feathery leaves curve out each to touch its neighbour's tip, the two tips together supporting a small supine crescent.

Another wall-panel is a frieze (15 b i) consisting of a repeated hook-motif, resembling the Greek letter Ω placed upon its side. The carving is flat, and it appears

at first sight simply to be an abstract pattern. This of course it now is, although its derivation is clear upon inspection of the borders of certain Sassanian dishes, where the overlapping leaves of a wreath are regularly broken down into this repetitive form.⁵⁴

A series of screens (13 a i) has a stylized cantharus, a straplike stem with superimposed hearts, and banana-like fronds. The stem of hearts occurs on Sassanian silver⁵⁵ and in the mosaics of the Dome of the Rock,⁵⁶ and the fronds recur on the tie-beams in the Dome of the Rock.⁵⁷ A cornice (2 d i) has as a repeating motif an upright sprig with nine tips set against a nine-lobed leaf; unless this is an example of Late Antique *Formenspaltung*,⁵⁸ parallels in the Dome of the Rock and on the wooden mimbar at Kairouan, where vegetable forms are also set against leaves, are relevant.⁵⁹ A basket-capital from St. Polyeuktos (3 b i) is decorated with an intricate diagonal interlace, recalling a Sassanian capital in Teheran (and earlier work at Hatra).⁶⁰ Another basket-capital (3 a i) has a split-palmette above a T-shaped stem, from which issue two nervously undulating lines, each terminating in a sub-rectangular (trapezoidal) block. These lines, which are surely not vegetable, may be derived from the so-called Sassanian riband, as seen ubiquitously in figured art or (more convincingly perhaps) binding a palmette in stucco-work at Kish;⁶¹ or from the streams of water that flow from and into the sacred tree in many periods of Mesopotamian art;⁶² or (iii) (more probably) from a confusion of both.

There was clearly in the 520s in Constantinople a fashion for things Persian, although whether Anicia Juliana led the fashion or followed it is not known. The exuberant display in St. Polyeuktos of novel Sassanian designs together with the more familiar classical motifs, all executed with unparalleled virtuosity, must represent a deliberate programme. Although it is tempting, particularly in view of Justin I's religious policy (which had recently re-established orthodoxy) and of Byzantine hostilities with Persia, to look for a religious or political statement in this combination of motifs, it seems unlikely that the programme was more than one of ostentation by the head of a singularly noble family with imperial antecedents in both East and West.⁶³ This ostentation took the form of a re-creation of the Temple of Solomon, whose decorative motifs may be presumed to have contributed, albeit at several removes, to Sassanian designs.

One of the most striking features of St. Polyeuktos is the novelty of its pier- and column-capitals, both of which show a marked break from late classical forms based upon the Corinthian and Composite. Pier-capi-

tals have a canted boss at each corner, which is supported not by volutes but by thick undercut foliage growing up from a pair of small cornucopias above the capital's lower border. Column-capitals either have a similar arrangement (as 3 d i) or are simple basket-capitals with four trapezoidal panels framed above, below, and at the corners by undercut interlace, and with no trace of boss or volute (as 3 a i, 3 b i, 3 c i). It is possible that the basket-capital was first developed here, and also perhaps its variant with eight lobes (the so-called melon-capital), which is found in SS. Sergius and Bacchus. It is notable that Justinian reintroduced the volute-capital for St. Sophia.

The overall carved decoration of vertical elements (e.g., piers 6 a i, 6 c i, pilaster 6 b i, and wall-panel 15 d i) is also a novelty in St. Polyeuktos, which was not followed in St. Sophia.⁶⁴

Another remarkable feature of our church is the rejection of classical mouldings and their traditional forms of decoration, particularly for the entablature. Little use was made of the ovolo moulding with its egg-and-dart, little of the roundel with its bead-and-reel, none at all of the *cyma reversa* with its erect acanthus, or the acanthus-scroll frieze. Although St. Polyeuktos displayed the classical vinescroll to great effect, it was in an entirely nonclassical setting, and, where there was a modillion-cornice, it was decorated, not as earlier in the Theodosian St. Sophia and St. John Studius and later in SS. Sergius and Bacchus and Justinian's St. Sophia with acanthus leaves, but with extraordinary palmettes.⁶⁵

The use of classical mouldings had been changing, in profile, proportion, and decoration, for more than a century. Their rejection by the sculptors of St. Polyeuktos was of great significance; for St. Polyeuktos in its exotic exuberance provided a challenge to Justinian, and his church of St. Sophia is best seen as a response to this challenge, substantially larger than Anicia Juliana's but in restrained and conservative style, resorting for the most part to well-tried classical features. At the same time, however, St. Sophia incorporated some oriental motifs, and of course it produced the marvellously intricate arched entablatures and capitals, which were to become hallmarks of Early Byzantine metropolitan style.

That some sculptors from St. Polyeuktos were employed on the decoration of St. Sophia seems probable from a comparison between, for example, the capital in Barcelona (3 d i) and capitals in the main order of St. Sophia. Both have as the principal motif a series of superimposed, symmetrical, horizontally splayed acan-

thus leaves, admittedly more formal in the case of St. Sophia. Again, similarities with SS. Sergius and Bacchus, notably the capitals and the long inscription incorporated into the entablature in relief, suggest that some of St. Polyeuktos' sculptors worked there too.

SS. Sergius and Bacchus was recently shown to have been the church of a large Monophysite monastery.⁶⁶ It is probably coincidence that what we may call the St. Polyeuktos repertory has a period of popularity in Coptic (Monophysite) Egypt, to judge from, for example, basket-capitals of split-palmette type (3 a i) in Alexandria and Cairo and from others with twisting grapevine at Sakkara.⁶⁷ Those appear to be of local stone, whereas a pair of column-capitals in the church of St. Sophia in Salonika, which are decorated with the oriental motifs of our pier-capitals of Venice-type (5 a i), are of Proconnesian marble.⁶⁸ On the Black Sea coast capitals of split-palmette type occur at Varna,⁶⁹ and at Constanța there is a large fragmentary pier-capital whose angle-decoration, vinescroll, and large leaves springing from what appears to be the lower limb of a central cross point to the workshops of St. Polyeuktos.⁷⁰

The material in the provinces is extensive, and it will eventually be possible to plot more clearly the overseas activities of these workshops, the patterns of export, and the extent of their influence and imitators. The material in Istanbul, too, which is attributable to these workshops—both before and after the decoration of St. Polyeuktos—is abundant, and its study will be greatly facilitated by the late Dr. Nezih Fıratlı's forthcoming catalogue of the Byzantine collections of the Istanbul Archaeological Museum.

In addition to the architectural sculpture, there is work on a small scale and in other materials, which can be associated with it. This includes ivory, and silver, and even agate.⁷¹ On a larger scale, the fanciful architecture depicted in the dome-mosaic of St. George at Salonika, with its two-storeyed exedrae and its peacocks, might, if the mosaic is of the sixth century, reflect the architecture of St. Polyeuktos, or, if it is of the fifth, be seen as somehow influencing it.⁷²

Finally, a word may be said about figured sculpture. The small rectangular panels with busts of Christ, the Virgin and Child, and various saints (19 a i – 19 a ix) are almost certainly pre-Iconoclast and probably of the church's first period. Traces of plaster along the edges of each panel show that they were set in some sort of frame, and a rectangular dowel-hole near the bottom edge of each was either for a clamp to secure the panel in its frame or, more likely, for a projecting pin from which, for example, a lamp might be suspended. It is not known where in the church they were placed, but one possibility is that they adorned a tempon or iconostasis.⁷³

Although it seems likely that the small marble heads presented in chapter 5 should be dated a century or more before St. Polyeuktos, they were found in church-destruction material and may thus, like the figured panels, have adorned the church. If the marble bust of a woman acquired recently by the Metropolitan Museum and attributed to Constantinople is of the sixth century as has been claimed,⁷⁴ then portrait-sculpture of a much higher calibre than hitherto realized was still being produced. It is notable that the treatment of the fingers of this bust is very close to that of fingers found at Saraçhane (chap. 5, 19 c xii – 19 c xvi, 19 c xviii, above). A sixth-century date for the Saraçhane heads seems unlikely but is not excluded.

The bust in the Metropolitan Museum is said to have come from Istanbul.⁷⁵ The sixth-century date proposed for it is persuasive, and, considering the extraordinarily high quality of the carving, we may perhaps ask whom it represents. A comparison of the hairstyle, broad face, widely spaced eyes, and fine jaw with small but distinctive chin of the bust with corresponding features in the portrait of Anicia Juliana in her manuscript of Dioscorides raises the distinct possibility that the bust may be a representation of Anicia Juliana.⁷⁶ It was acquired in 1966, and, developing the above hypothesis, one might wonder whether it came from the underpass excavation or landscape-grading at Saraçhane, possibly from Anicia Juliana's palace rather than from the church.

The Historical Context

POLITICAL history is rarely the province of an archaeologist. The church of St. Polyeuktos, however, was on any estimate an extraordinary building constructed at a critical period by a very remarkable person. Although the historical evidence for the life of Anicia Ju-

liana is meagre, what there is may be placed together with the archaeological evidence in context and examined for clues to Anicia Juliana's motives in commissioning the monument.

On her father's side Anicia Juliana's family was,

quite simply, one of the most illustrious in the Roman Empire.⁷⁷ The Anicii had regularly provided men of the highest distinction in public life since at least the third century B.C., and in A.D. 472 Flavius Anicius Olybrius, Anicia Juliana's father, was made Emperor. On her mother's side, both her grandparents were directly descended from Theodosius I; her mother Placidia was daughter of Valentinian III (son of Galla Placidia and grandson of Theodosius I) and Licinia Eudoxia (daughter of Theodosius II, granddaughter of Arcadius, and great-granddaughter of Theodosius I) (see Fig. C).

Anicia Juliana was born in Constantinople ca. 463 and in 480 married Arcobindus. Their son was named Flavius Anicius Olybrius and held the consulship as a boy in 491, fifteen years before his father (*cos.* 506). He later married Eirene, daughter of Anastasius I, presum-

ably before the latter's death in 518. Arcobindus served with distinction on the eastern frontier, was proposed as Emperor in a religious riot in 512, an honour he declined, and died before the building of St. Polyeuktos. Olybrius survived his mother's death in ca. 528, was somehow implicated in the Nika revolt against Justinian in 532, and was exiled and had all his property (including presumably his mother's palace and palace-church) confiscated by that Emperor. Justinian later relented; Olybrius was allowed to return and to recover his property.⁷⁸

In a recent biography, Anicia Juliana is represented as a modest person, a patron of the arts, and a devout supporter of religious orthodoxy, disillusioned by politics, but perhaps from time to time useful in view of her connections with the Vandal and Gothic courts and

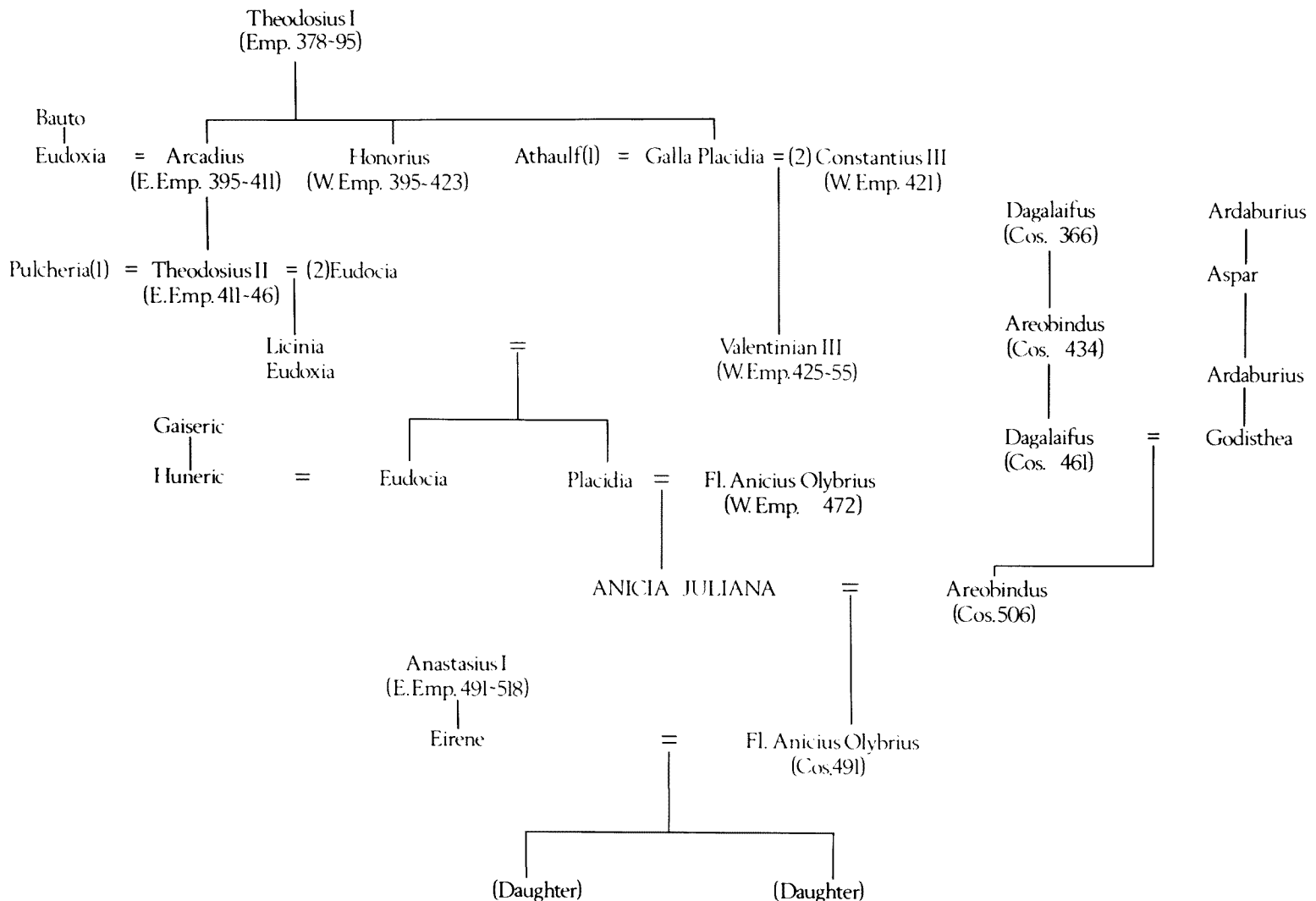


FIGURE C. Genealogical Table Showing Anicia Juliana's Principal Connections

with Rome.⁷⁹ There is, however, little modesty either in *Anthologia Palatina* 1, 10, which, even with some allowance for the genre, reads like a political manifesto, or in the church itself, which for a handful of years, until the construction of St. Sophia, simply eclipsed all other churches in the city both in size and in splendour. Poem and church alike make a political statement, which must have been deliberate and fairly explicit.

This statement was both imperial and dynastic, the choice of saint recalling her descent from Theodosius II (whose wife Eudocia had built the earlier church of St. Polyeuktos), the epigram spelling it out, and the size and refined opulence of the new church being on a truly aristocratic and imperial scale. The context for this propaganda was the reign of Justin I, an elderly Illyrian peasant and soldier who had ascended the throne in 518 and whose aristocratic connections were nil.

Whether or not the building's decorative programme, with its extraordinary combination and range of oriental and classical motifs, also carried a religious message is not so clear. One of Justin's first acts on his accession had been to reverse the religious policy of his two predecessors. Monophysitism was now condemned and a return officially made to orthodoxy as defined at Chalcedon, opening the way to full restoration of links with Rome, which occurred in 523. In view of Anicia Juliana's supposed orthodoxy, it might be thought surprising that her church should at just this time draw so clearly and extensively on the art of Sassanian Persia. It might be argued that these Persian motifs were already established in Constantinople under Zeno and Anastasius and had lost any regional association, but the consistency and clarity of design in St.

Polyeuktos strongly suggest that this was in fact an entirely new programme.⁸⁰

Irrespective of any particular significance that might be read into the sculptural programme, the construction of St. Polyeuktos must have appeared as a challenge to the authority of Justin and his nephew Justinian. Whether or not there is any truth in the tale told by Gregory of Tours, of Justinian's snub by Anicia Juliana soon after his succession, it is *ben trovato* and probably reflects accurately a strained relationship.⁸¹ The story's summary by Mango and Ševčenko may be quoted:

The Emperor Justinian . . . was apprised of Juliana's great wealth and requested her to make a contribution to the public treasury. She feigned to be willing to do so and invited the Emperor to visit her in her house after a given period of time during which she might be able to bring her treasure together. Meanwhile, she called in craftsmen, handed them all her gold and directed them to cast it into plaques which were to be affixed to the [vaulted?] roof [*cameram*] of St. Polyeuktos. After this had been done, Juliana invited the Emperor to come and, having taken him to the martyr's church, pointed to its roof. "My poverty," she said, "is contained in this work. Do with it whatever you please." In this way she was able to avert Justinian's rapacity.⁸²

Gregory adds that, as she sent him away, she slipped from her finger and handed to him by way of consolation a gold ring set with an emerald. The construction of the third church of St. Sophia in 532-7 on the ashes of the second is best seen as Justinian's decisive answer to this challenge.

NOTES

PREFACE

1. Gertrude Bell, "Churches and Monasteries of the Tur Abdin and Neighbouring Districts," in M. van Berchem and J. Strzykowski, *Amida* (Heidelberg, 1910), p. 224.

CHAPTER 1

1. J. Lafontaine, "Fouilles et découvertes byzantines à Istanbul de 1952 à 1960," *Byzantion* 29-30 (1959-60), p. 386 (cf. also pp. 358-60). The blocks were also published by F. Dirimtekin, "Finds from the Site of the Old Square West of the Town Hall at Saraçhane," *AMY* 2 (1960), pp. 42-3.

2. C. Mango and I. Ševčenko, "Remains of the Church of St. Polyeuktos at Constantinople," *DOP* 15 (1961), pp. 243-7.

3. A. Grabar, *Sculptures byzantines de Constantinople* (Paris, 1963), pp. 64-5.

4. R. M. Harrison and N. Firatlı, "Excavations at Saraçhane in Istanbul: First Preliminary Report," *DOP* 19 (1965), pp. 230-6; "Second and Third Preliminary Reports," *DOP* 20 (1966), pp. 223-38; "Fourth Preliminary Report," *DOP* 21 (1967), pp. 273-8; "Fifth Preliminary Report," *DOP* 22 (1968), pp. 195-203, and (by J. W. Hayes) 203-16. The progress of the excavation was also regularly reported in *IAMY*, *TAD*, and (by M. J. Mellink) *AJA*.

5. Mr. Griswold, whose archaeological landscaping achievements include the Athenian Agora, visited Saraçhane in 1967; we are most grateful for his simple, imaginative, and realistic proposals, which it is hoped may yet be implemented.

6. *DOP* 15 (1961), p. 244. For a recent detailed study, cf. C. Capizzi, "Anicia Giuliana (462 ca-530 ca). Ricerche sulla sua famiglia e la sua vita," *Rivista di Studi Bizantini e Neol-lenici* n.s. 5 (XV) (1968), pp. 191-226. This is discussed below in chapter 15.

7. The epigram, scholia, and other texts that mention the church are set out below. The reference to the son and granddaughters is in line 39.

8. Lines 1-3.

9. "Erat enim [sc templum martyris] proximum domui eius" (full text in section 4c below).

10. See the section of "testimonia" below, item (c).

11. B. de Khitrowo, *Itinéraires russes en Orient* (Geneva,

1889), pp. 104, 137, 162, 203; cf. Janin, *Constantinople*, pp. 419-20.

12. *DACL* 14, 1 (1939), s.v. Polyeucte.

13. *Ibid.*, also 8, 1 (1928), coll. 1177-8, no. 1100 (lamp inscribed + ΤΟΥ ΑΓΙΟΥ ΠΟΛΥΟΚΤΟΣ [sic] +, from Coptos); for "Αγ. Πολύευκτος ἐν τοῖς Βιγλεντίου," cf. Janin, *Constantinople*, p. 420.

14. Malalas, *Chronographia* xviii (Bonn ed., in *PG* 97), p. 478, lines 18-21.

15. See chapter 15.

16. Cf., e.g., N. Firatlı, "Annexe au livre sur Les stèles funéraires de Byzance gréco-romaine," *IAMY* 13-14 (1966), pp. 188-209, esp. 206-8 and pls. xxv-xxviii; Müller-Wiener, *Bildlexikon*, p. 19 (N. Firatlı) and map.

CHAPTER 2

1. President Cevdet Sunay later visited the Archaeological Museum of Istanbul, where Dr. Firatlı was able to give him a full account of the archaeological work at Saraçhane.

2. H. Glück, *Die Bäder Konstantinopels* (Vienna, 1921), pp. 141-2, 159, 172; E. H. Ayverdi, *19 Asırda İstanbul Haritası* (Istanbul, 1958), sheet C4; Müller-Wiener, *Bildlexikon*, p. 192 and map on p. 275.

3. The numbering is that of K.O. Dalman, *Der Valens-Aquädukt in Konstantinopel* (Bamberg, 1933). For a brief description of the sounding, see R. M. Harrison, "A Note on the Aqueduct of Valens," *IAMY* 13-14 (1966), p. 219 and pl. Lxi, 1.

4. *DOP* 19 (1965), p. 233, figs. B, C.

5. *Ibid.*

6. The early sherds suggest that the clay may have come from the area of the earlier settlement, in the eastern part of the city. The quantity of clay appears to have been enormous, and the source may have been another building-site (cistern?).

7. Bricks in the piers of the crypt were 0.36-0.39 m square, and ten courses stood 0.91 and 0.93 m high in the south-western and north-western pier of the eastern bay, respectively.

8. *DOP* 19 (1965), pp. 231-3, figs. B, C.

9. See chapter 15 below. I have seen displayed in the Amca Hüseyin Paşa Mescidi a dovetail-cramp of dark wood ca. 0.30 m long, said to have come from a mosque in Amasya.

10. These pilasters were 1.92 m high, 0.39 m wide, 0.09 m

thick; two of them, at approximately half-way up, carried marks, in one case \bar{Z} , in the other \underline{Z} . The pilasters, which are of Proconnesian marble, are presumably spolia, and they may be masons' marks (IN?) from an earlier period and use.

11. Müller-Wiener, *Bildlexikon*, Abb. 205, is wrong to show the south wall of the atrium, which was not found; an L-shaped trench was opened in TU/20-21 in an attempt to locate it, but without avail.

CHAPTER 5

1. See also 22 g i below.

2. See also 22 c i–22 c iii below.

3. R. M. Harrison, "A Constantinopolitan Capital in Barcelona," *DOP* 27 (1973), pp. 297–300; H. Schlunk, "Byzantinische Bauplastik aus Spanien," *Madridrer Mitteilungen* 5 (1964), pp. 234–54 (esp. 235–7, pls. 66–9).

4. In addition to 5 a ii and 5 a iii following, cf. also 22 d i below.

5. M. Kalligas, *οι πέσσοι τῆς πτολεμαϊδος*, *Arch. Eph.* 1938 (publ. 1940), pp. 70–99.

6. *Ibid.*, from which the measurements below are taken. In addition to ii and iii here following, cf. also 22 e i below.

7. Strictly this is a hood (not a lintel), which should have been placed in category 2 above.

8. This is the plinth for a barrier with entrance (to judge by the wear on the corresponding block ii below) and should have been entered in the following category 12. A schematic section-drawing and a photograph were included in Matthews, *Early Churches*, p. 54, fig. 26, and pl. 40.

9. See also 13 y i and 13 y ii below, fragments of a plinth of *verde antico* which ought to have been included in this section.

10. A.H.S. Megaw, "Notes on Recent Work of the Byzantine Institute in Istanbul," *DOP* 17 (1963), p. 346 and fig. 9.

11. In *DOP* 22 (1968), p. 199, I suggested that this arch was "no earlier than the twelfth century." I see no reason now why it should not be of the sixth.

12. Discussed by U. Peschlow, "Dekorative Plastik aus Konstantinopel an San Marco in Venedig," in *Ἀφιέρωμα στὴ μνήμη Στυλιανοῦ Πελεκανίδη* (Thessaloniki, 1983), pp. 406–16, esp. 407–8, and pls. 1, 2.

13. N. Asgari, "Edirnekapı Başlığı," *Arkeoloji ve Sanat* 1 (2), pp. 14–17.

14. Recognised by Dr. Firatlı in 1965.

15. C. Mango and E.J.W. Hawkins, "Additional Finds in Fenari Isa Camii," *DOP* 22 (1968), p. 178 and fig. 9.

16. J. Ebersolt, *Mission archéologique de Constantinople* (Paris, 1921), p. 4 and pl. xxiv, 3.

17. Drawn to my attention by Dr. Firatlı.

18. Again, drawn to my attention by Dr. Firatlı.

19. S. Tavano, *Aquileia guida dei monumenti Cristiani* (Udine, 1977), p. 129; Tavano, "La restaurazione Giustiniana in Africa e nel alto Adriatico," *Aquileia e l'Africa, Antichità*

Altoadriatiche 5 (1974), p. 270f.; Tavano, *Aquileia Nostra* 42 (1971), cols. 120–8, figs. 13–14. Cf. F. W. Deichmann, *BZ* 66 (1973), p. 236. I owe knowledge of this important carving and of its publication to the kindness of Dr. N. Netzer.

20. U. Peschlow, "Dekorative Plastik" (n. 12 above), pp. 410–11, pl. 3.

21. *Ibid.*, pp. 409–10, pl. 3.

22. M. Vickers, "A Sixth-Century Byzantine Source for a Venetian Gothic Relief in Vienna," *DOP* 33 (1979), pp. 335–6. That the "Gothic relief" might simply be the reworking of a Byzantine original occurred independently to both Mr. E.J.W. Hawkins and myself. A.H.S. Megaw argued, in *DOP* 17 (1963), p. 346, that screens in the Pantocrator (cf. 13 a i above) contained three "design-units" (i.e., panels with cantari) and consequently measured some 1.81 m in width, which exactly corresponds with the piece in Vienna.

CHAPTER 6

1. For this use of slate and an adhesive in St. Sophia, cf. P. A. Underwood in *DOP* 14 (1960), p. 206: "a very hard adhesive bedding, about 4 cm. thick and of a brown color, which is made of a compound of a resin, or pitch, and what we believe to be marble dust. This bedding is backed by pieces of slate which bring the total thickness of the panel to between 6 and 7 cm."

2. The principal marbles are now well known, thanks to recent pioneering work by N. Asgari, J. B. Ward-Perkins, and others. At Saraçhane, however, there is some doubt about the black-and-white marble, which resembles one from Adapazarı in Bithynia in general use for revetment in Istanbul today. Modern examples appear regularly to have a slight streak of orange, which is lacking both at Saraçhane and in the Pyrenean variety of black-and-white, known to the Romans as *Celticum*. It is possible that what we have at Saraçhane is *Celticum*, presumably imported at a much earlier period. For good illustrations in colour of all these marbles, cf. R. Gnoli, *Marmora Romana* (Rome, 1971).

3. Dr. K. T. Greene kindly ran several chi-square probability-tests on this table, confirming the statistical significance of the differences, which are signalled by an asterisk.

4. For S. Vitale, H. Raabe in F. W. Deichmann, *Ravenna* II, 2 (Wiesbaden, 1976), pp. 118–35, Abb. 62–3; for Poreč (Parenzo), B. Molajoli, *La basilica eufrasiana di Parenzo* (Padua, 1943).

5. The close link between S. Vitale and the Basilica Euphrasiana was pointed out to me by E.J.W. Hawkins and R. Cormack, who have inspected both sets of panels in one day. More recently I have had the benefit of long discussions with Ann Terry, who has made a detailed study of the decoration of the Basilica Euphrasiana and whose conclusions I have followed here.

6. L. Ibrahim, R. Scranton, R. Brill, *Kenchreai II: The Panels of Opus Sectile in Glass* (Leiden, 1976).

CHAPTER 10

1. The resolution of the abbreviation βα . . . or βαρ . . . has long puzzled scholars. Mamboury's suggestion that the full word should be βαρέσσαντος, as Mango observes, "compels assent", but poses "a linguistic difficulty." See E. Mamboury, "Une nouvelle lecture raisonnée des inscriptions de briques byzantines et l'emploi de ces dernières dans la datation des monuments des V^e et VI^e siècles," *Byzantion* 19 (1949), pp. 113-25, esp. 122-4; and C. Mango, "Byzantine Brick Stamps," *AJA* 54 (1950), pp. 19-27, esp. p. 23.
2. Cf. E. Unger, "Grabungen an der Seraispitze von Konstantinopel," *Arch. Anz.* (1916), pp. 1-48, 21, number 10.
3. For Τῆς Νέας denoting a building see C. Mango, "Byzantine Brick Stamps" (n. 1 above) pp. 19-27, esp. pp. 24 and 26. See also B6 and C13-15 below.
4. Cf. A. S. Dorigny, "Inscriptions céramiques byzantines," *RA* 32 (1876), pp. 82-95, 87, number 21.
5. Cf. W. S. George, *The Church of St. Eirene at Constantinople* (Oxford, 1912), pl. 16, 5.
6. *Ibid.*, pl. 16, 6.
7. Cf. *Great Palace* 1, pl. 14, number 50.
8. *Ibid.*, pl. 16, 11.
9. Cf. D. Talbot Rice, "The Brick Stamps," in *Great Palace* 2, pp. 105-9, fig. 21, 4.
10. Cf. A. S. Dorigny, "Inscriptions céramiques byzantines" (n. 4 above), p. 92, number 41, pl. xiv, 9.
11. *Ibid.*, p. 92, number 48, pl. xiv, 10.
12. Cf. *Great Palace* 1, pl. 14, 42.
13. E. Unger, "Grabungen" (n. 2 above), p. 17, number 3.
14. *Ibid.*, number 2.
15. Cf. *Great Palace* 1, pl. 14, 42.
16. E. Unger, "Grabungen" (n. 12 above), 18, number 6.
17. A. S. Dorigny, "Inscriptions céramiques byzantines" (n. 4 above), 87, number 19, pl. xiv, 5.
18. Cf. the story, told in *Narratio de S. Sophia* 28 (C. Mango, *The Art of the Byzantine Empire 312-1453*, Englewood Cliffs, N.J., 1972, p. 102), that Justinian acquired special stamped bricks from Rhodes for the dome of St. Sophia.
19. A. S. Dorigny, "Inscriptions céramiques byzantines" (n. 4 above), p. 84-7.

CHAPTER 13

1. O. Necrasov, "Le processus de brachycephalisation dans les populations de Roumanie à partir du Néolithique et jusqu'à nos jours," in W. Bernhard and A. Kandler, eds., *Biology of Human Populations. Contributions to their Structure and Dynamics* (Stuttgart, 1974), pp. 512-24.
2. J. L. Angel, *The People of Lerna. Analysis of a Prehistoric Aegean Population* (Washington, D.C., 1971).
3. *Ibid.*
4. H.T.E. Hertzberg, E. Churchill, C. W. Dupertuis,

R. M. White, and A. Damon, *Anthropometric Survey of Turkey, Greece and Italy* (Oxford, 1963).

5. On equations, M. Trotter and G. C. Gleser, "Estimation of Stature from Long Bones of American Whites and Negroes," *American Journal of Physical Anthropology* 10 (1952), pp. 463-514; and "A Re-evaluation of Estimation of Stature Based on Measurements of Stature taken during Life and of Long Bones after Death," *American Journal of Physical Anthropology* 16 (1958), pp. 79-124.

6. D. R. Brothwell, *Digging up Bones. The Excavation, Treatment and Study of Human Skeletal Remains* (London, 1972).

7. S. W. Hillson, "Diet and Dental Disease," *World Archaeology* 11 (1979), pp. 147-62.

8. J. L. Angel, "Greek Teeth: Ancient and Modern," *Human Biology* 16 (1944), pp. 283-97.

9. H. G. Carr, "Some Dental Characteristics of the Middle Minoans," *Man* article 157, August 1960, pp. 119-22.

10. M. Fuste, "Lesiones maxilo-dentarias en cráneos prehistóricos de Gran Canaria," *Zeitschrift für Morphologie und Anthropologie* 51 (1961), p. 322.

CHAPTER 14

1. Professor K. Kosswig kindly examined the principal groups of animal bones and molluscs at Saraçhane in September 1969 and submitted a brief preliminary report that month. Circumstances have unfortunately prevented a more detailed examination of the material, and the present report is based upon Professor Kosswig's original notes, with valuable additional comments on the molluscs by Dr. D. S. Reese of St. John's College, Cambridge.

CHAPTER 15

1. There is general agreement that the Mesê divided somewhere to the west of the Forum Tauri, that the northern branch passed the Holy Apostles, and that Polyeuktos lay on the northern branch, some way to the east of the Holy Apostles. See chapter 1 above.

2. Most conveniently on the endpaper-map at 1:2,000 in Müller-Wiener, *Bildlexikon*.

3. R. Naumann, "Der antike Rundbau beim Myrelaion und der Palast Romanos I. Lekapenos," *IM* 16 (1966), pp. 199-216, esp. 209-11.

4. Janin, *Constantinople*, p. 410.

5. I am much indebted in this section to the help of Prof. C. Mango.

6. See Müller-Wiener, *Bildlexikon*, p. 19 (N. Firatlı) and map; also N. Firatlı, *IAMY* 13-14 (1966), pp. 188-209, and the sarcophagus and stelai recovered at Saraçhane (see above, chap. 2 and chap. 5, 23 d iii-23 d ix, respectively).

7. The modern boulevard from Saraçhane peters out at the

University, traffic to Beyazit taking a dog-leg to right and then left.

8. Heights above mean sea-level are as follows: atrium-pavement of St. Polyeuktos 35.20 m; Column of Marcian base ca. 47 m; Atatürk Bulvarı modern watershed ca. 41 m, ancient watershed ca. 36 m(?); Aqueduct footings in Sounding B ca. 33 m.

9. Open exedrae are a characteristic of centrally planned buildings, from at least the time of Hadrian (cf. the Pantheon in Rome and the Piazza d'Oro of the Villa Adriana at Tivoli; J. B. Ward-Perkins, "The Italian Element in Late Roman and Early Medieval Architecture," *PBA* 33 (1947), pp. 163-83.

10. Line 57, where ἀκτῖναι might be either rays of light or the radiating ribs of a dome.

11. R. M. Harrison, "The Church of St. Polyeuktos in Istanbul," *Akten des VII Internationalen Kongresses für Christliche Archäologie, Trier 1965* (Vatican, Berlin, 1969), pp. 543-9; R. M. Harrison, "The Sculptural Decoration of the Church of St. Polyeuktos," *Actas del VIII Congreso Internacional de Arqueología Cristiana, Barcelona 1969* (Vatican, Barcelona, 1972), pp. 325-6.

12. See chapter 1 above.

13. My attention was drawn to this relevant fact by Mr. R. Mainstone.

14. R. M. Harrison, "Churches and Chapels in Early Byzantine Lycia," *AS* 13 (1963), pp. 117-51, esp. 131-6, 148-50.

15. J. B. Ward-Perkins, "The Italian Element" (n. 9 above), pp. 163-83.

16. M.R.E. Gough, "The Emperor Zeno and Some Cilian Churches," *AS* 22 (1972), pp. 199-212; C. Mango, "Isaurian Builders," in P. Wirth, ed., *Polychronion. Festschrift Franz Dölger* (Heidelberg, 1966), pp. 358-65. The ascription of the East Church at Alahan to Zeno is argued in the full excavation report, which is in press.

17. G. Forsyth, "Architectural Notes on a Trip through Cilicia," *DOP* 11 (1957), pp. 223-36; Forsyth's proposal of a pyramidal timber roof was accepted by Gough, who had the additional evidence of architectural survey and excavation; cf. M.R.E. Gough, "Excavations at Alahan Monastery. Third Preliminary Report," *AS* 14 (1964), pp. 185-90; M.R.E. Gough, "Alahan Monastery. A Masterpiece of Early Christian Architecture," *The Metropolitan Museum of Art Bulletin* n.s. 26 (June 1968), pp. 455-64 esp. 461-3. The forthcoming full report confirms these preliminary conclusions.

18. The length of the church's north wall is 51.45 m, the length of its west wall 51.90 m; some small allowance may be made for error or subsidence. I owe the suggestion of the cubit and of its biblical implications to the kindness of Mr. M. J. Vickers, who had encountered a similar unit (the "punic foot" of 0.515 m) in Roman second-century building in Tripolitania: see J. H. Humphrey, F. B. Sear, M. Vickers, "Aspects of the Circus at Lepcis Magna," *Libya Antiqua* 9-10 (1972-3), pp. 25-97, esp. 47 and 91. For the long or royal cubit, see R.B.Y. Scott, "Weights and Measures of the Bi-

ble," *The Biblical Archaeologist* 22, 2 (1959), pp. 22-41; R.B.Y. Scott, "The Hebrew Cubit," *Journal of Biblical Literature* 77, 3 (1958), pp. 205-14; and R.B.Y. Scott, "Postscript on the Cubit," *Journal of Biblical Literature* 79, 4 (1960), p. 368; also J. Hastings, ed. *A Dictionary of the Bible* (Edinburgh, tenth impression, 1924), s.v. Weights and Measures. I am most grateful for help with the cubit and the biblical references below to my colleague Prof. J. F. Sawyer. The apsidal building in the north-western sector, which may have been the baptistery (see below), is 20.80 m square, or approximately 40 cubits. The length of the north wall of the atrium is 39.0 m long, or 75 cubits.

19. There are descriptions of Solomon's Temple in 1 Kings 6 and 7, and 2 Chron. 2-5; compare the description of the Temple in Ezekiel's Vision (Ezek. 40-3). For a recent discussion, see *Encyclopedia Judaica* 15 (1971), s.v. Temple. That the unit was the long cubit ("which was one cubit and a hand's breadth") is stated in Ezek. 40: 5; the Temple's overall dimensions are given in Ezek. 41: 13-14. The decorative parallels are the palm-tree capital (4 b i); the split-palmette capital (3 a i), which may be said to be shaped like a lily, and indeed in Italian is nicknamed "del Giglio" (cf., e.g., G. Fattorusso, *Venise*, Florence, 1954, p. 57); cf. also J. Ruskin, *The Stones of Venice* vol. 2 (new ed., London, 1898), pp. 136-7, figs. 30-31 ("lily capital"), where there is, also, incidental reference to Solomon's Temple; the basket-capital with lattice ("network") decoration (3 b i), pomegranates (2 a i, and 6 a i), and open flowers (6 b i). The Temple also had carved cherubim, whose form, however, was never very explicit. Zoomorphic, with wings and many eyes, they supported the Throne of God and represented royal power. Could their place have been taken by the pairs of confronted peacocks (e.g., 1 a v), which adorned St. Polyeuktos' nave? For further remarks, see my article in *Okeanos* (*Harvard Ukrainian Studies* 7 [1983]).

20. For a discussion of these internal features, see Mathews, *Early Churches*.

21. *Ibid.*, p. 110.

22. If this is correct, was the purpose of such access to make provision for a dramatic appearance on the ambo of either a person or a relic?

23. For an idea of the canopy, see M. Bonfioli, *Tre arcate marmoree protobizantine a Lison di Portogruaro* (Rome, 1979), where three pieces of sculpture are shown to have many affinities with the Polyeuktos material. The Sarachane excavations yielded columns attributable to the ciborium, but no fragments of a canopy. Is this because the canopy is in Italy?

24. 14 c i, consisting of a slotted rectangular post which supported a colonnette, is a good candidate, as T. F. Mathews proposed (Mathews, *Early Churches*, p. 54); it may be noted, however, that the find-spot of this piece was in the destruction-level of the grand cistern (level 1005), and there might have been other locations than the chancel for posts of this type (cf. e.g., the west gallery of St. Sophia). Again, 11 y i

and 11 y ii are good candidates for the chancel-plinth or -stylobate, as suggested by Mathews, and blocks 21 k i and 21 k ii good candidates for this epistyle. It is worth stressing, however, that none of these attributions to the chancel is certain.

25. Mathews, *Early Churches*, pp. 105-7, discusses the absence of the tripartite sanctuary in Istanbul; C. Mango, "On the History of the *Templon* and the Martyrion of St. Artemios at Constantinople," *Zograf* 10 (1979), pp. 40-3, esp. fig. 1, now presents one early example for which there is literary evidence.

26. See chapter 2 above.

27. On this hypothesis the palace too will have been terraced on the southern slope; if it was contiguous with the church, there may also have been direct access to the latter at gallery-level too.

28. There is reference to a presumably distinctive arch in the scholion at the end of line 41 of the epigram. The arch was certainly outside the church, but it is not clear whether it was in the church's western façade or elsewhere in the atrium.

29. See J. B. Ward-Perkins, "Notes on the Structure and Building Methods of Early Byzantine Architecture," *Great Palace* 2, chapter 3, pp. 52-104.

30. That this was the practice is clear from evidence on this site (see n. 32, below), from recent work on the quarries of Proconnesus by Dr. N. Asgari (e.g., "Roman and Early Byzantine Marble Quarries of Proconnesus," *Proceedings of the Xth International Congress of Classical Archaeology*, 1973 [Ankara, 1978], pp. 467-80), and from observations elsewhere, (e.g., J. B. Ward-Perkins, "Quarrying in Antiquity: Technology, Tradition and Social Change" *PBA* 57 (1971), pp. 137-58).

31. *Great Palace* 2, p. 57.

32. The evidence at Sarcophane consists of (1) the large quantity of marble-waste which was used as packing for the nave-floor (see chap. 1 above, and the samples 21 h i illustrated below), (2) a number of pieces of unfinished carving (e.g., 3 d ii and 5 c i and ii), and (3) engaged pier-capital 5 a iv, where the carving is complete, except the edge nearest the wall which, when the capital was *in situ*, would have been awkward to reach and virtually invisible (pls. 145, 146). The observation earlier that St. Polyeuktos appears to have been modelled on descriptions of the Temple of Solomon and its decoration, should be borne in mind throughout the following discussion.

33. The *Patria*'s unreliability is well exemplified in the passage on St. Polyeuktos set out above in chapter 1.

34. Dr. S. Walker (The British Museum) kindly informs me that she now has evidence that the quarries at Proconnesus were worked as early as the 6th century B.C. For practice and continuity, see note 30 above.

35. Erected between 527 and 536; see C. Mango "The Church of Saints Sergius and Bacchus at Constantinople and

the Alleged Tradition of Octagonal Palatine Churches," *JÖB* 21 (1972), pp. 189-93.

36. N. Firatlı, "Deux chapiteaux rares à décoration animale trouvés à Istanbul," *CA* 23 (1974), pp. 41-6.

37. See, e.g., J. B. Ward-Perkins, "The Imported Sarcophagi of Roman Tyre," *Bulletin du Musée de Beyrouth* 22 (1969), pp. 109-45, esp. figs. 3-5.

38. J. B. Ward-Perkins, "Quarrying in Antiquity" (n. 30 above), pp. 137-58.

39. Ravenna: F. W. Deichmann, *Ravenna* II, 2 (1976), pp. 106-12, who discusses the 14 examples of this type in S. Vitale (which he believes, p. 109, belong to the period 538-45 and were exported ready-made) and gives a full list of those known from elsewhere, including 6 in Poreč (which he dates to the 550s or 560s). There are variations in detail in the S. Vitale series: sometimes the cross-bar is replaced by a ring, usually the split-palmette is 5-lobed (rather than, as at Sarcophane, 3-lobed), usually the tendril presents a simple S-curve, only on one side of the last capital (counting clockwise from the sanctuary) having the undulations of the Sarcophane example. Poreč: B. Molajoli, *La basilica Eufrasiana di Parenzo* (2nd ed. Padua, 1943), figs. 43, 45, 47-9, 73; these are variants, having an acanthus stem in the place of interlace borders.

40. F. W. Deichmann, *Ravenna* II, 2 (1976), p. 48, observes that the traditional date of 526 for S. Vitale is based upon a misreading; the foundation was simply in the episcopate of Ecclesius, i.e., in the period 521/2-531/2. The monogram of Victor, who became bishop in 537/8, has been recognized on gallery-imposts (*ibid.*, p. 4). This may, but need not, imply a date later than Ecclesius for the capitals of the principal order.

41. A. A. Vasiliev, *Justin the First* (Cambridge, Mass., 1950), p. 214.

42. Museo Arcivescovile: R. O. Farioli, *La scultura architettonica (Corpus della scultura paleocristiana bizantina ed alto medioevale di Ravenna 3)* (Rome, 1969), nos. 50, 51.

43. Basilica Eufrasiana: C. Mango, *Byzantine Architecture* (New York, 1976), pl. 70.

44. Archaeological Museum, Split (from entrance to Salona baptistry): J. J. Wilkes, *Dalmatia* (London, 1969), pl. 56.

45. F. Winter, *Altertümer von Pergamon*, vii, Textb. p. 337, no. 418, Tafelb. pl. 41; J.M.C. Toynbee, "The Ara Pacis Reconsidered," *PBA* 39 (1953), p. 90, pl. xxiv.

46. J.M.C. Toynbee, "Ara Pacis" (n. 45 above) p. 77, pls. xxv-xxvi; G. Moretti, *Ara Pacis Augustae* (Rome, 1948), vol. I, figs. 32, 65.

47. B. Ashmole, "Cyriac of Ancona and the Temple of Hadrian at Cyzicus," *Journal of the Warburg and Courtauld Institutes* 19, nos. 3-4 (1956), pp. 179-91, esp. 189 and pls. 39d and e; E. Akurgal, *Ancient Civilizations and Ruins of Turkey* (2nd ed., Istanbul, 1970), pl. 29.

48. O. Obendorf and R. Schöne, *Die Antiken Bildwerke des Lateranischen Museums* (Leipzig, 1867), nos. 320, 320a; D. E.

Strong, *Roman Imperial Sculpture* (London, 1961), p. 101, pl. 114.

49. E.g., E. v. Mercklin, *Antike Figural Kapitelle* (Berlin, 1962), no. 83; also, for an Achaemenian palace in Susa, A. U. Pope, *A Survey of Persian Art* vol. 4 (London and New York, 1938), pl. 101.

50. E.g., J. B. Ward-Perkins, "The Roman West and the Parthian East," *PBA* 51 (1965), pp. 175-99, esp. 192 and pl. lvb.

51. *Ibid.*, p. 191, pl. lviii.

52. See J.-P. Lauer, C. Picard, *Les statues ptolémaïques du Serapeion de Memphis* (Paris, 1955), pp. 194-209, figs. 98, 100-103, pls. 19, 20.

53. A. Grabar, "Le rayonnement de l'art sassanide dans le monde chrétien," *Accademia Nazionale dei Lincei, Quaderno* 160 (1971), pp. 679-707 (esp. 686-8); Grabar, *Sculptures byzantines de Constantinople* (Paris, 1963), pp. 64-5; R. M. Harrison, "The Sculptural Decoration of the Church of St. Polyeuktos" (n. 11 above), pp. 325-6; C. N. Lewis, "The Origin of the Sculptural Style of St. Polyeuktos" (M.A. thesis, Columbia University, 1971).

54. See, e.g., A. U. Pope, *Persian Art* (n. 49 above), pl. 227 (a silver plate in the British Museum); J.P.C. Kent, K. S. Painter, eds., *The Wealth of the Roman World* (London, 1977), no. 317.

55. See, e.g., R. Girshman, *Iran, Parthes et Sassanides* (Gallimard, 1962), fig. 257.

56. K.A.C. Creswell, *Early Muslim Architecture. Umayyadd. A.D. 622-750* I, 1 (2nd ed., Oxford, 1969), pls. 31c, 32a, 33a; cf. also O. Grabar, "The Umayyad Dome of the Rock in Jerusalem," *Ars Orientalis* 3 (1959), pp. 33-62.

57. K.A.C. Creswell, *Early Muslim Architecture* (n. 56 above), I, pl. 28a.

58. See A. Goldschmidt, *Die Bedeutung der Formenspaltung in der Kunstentwicklung*, a paper delivered at the Harvard Tercentenary Conference of Arts and Sciences (Cambridge, Mass., 1937), 11 pp.

59. K.A.C. Creswell, *Early Muslim Architecture* (n. 56 above), I, pls. 21c, 26c, f; see also M. S. Dimand, "Studies in Islamic Ornament. I. Some Aspects of Omayyad and early 'Abbāsid Ornament," *Ars Islamica* 4 (1937), pp. 293-337, for a general discussion of the whole topic, including in particular a wooden carving from Takrit (figs. 1-5) and the wooden mimbar in the Great Mosque at Kairouan (esp. figs. 10-13).

60. H. Luschey, "Zur Datierung der Sassanidischen Kapitelle aus Bisutun und des Monuments von Taq-i-Bostan," *TM* (1968), pp. 129-42, esp. Taf. 52,6; for Hatra, R. Girshman, *Parthes et Sassanides* (n. 55 above), fig. 102.

61. A. U. Pope, *A Survey of Persian Art*, vol. 1 (London and New York, 1938), fig. 168b.

62. See, e.g., H. Frankfort, *The Art and Architecture of the Ancient Orient* (2nd revised impression, Harmondsworth, 1958), pl. 90, for an Assyrian example from Nimrud.

63. See C. Mango, "Storia dell'Arte," in *La civiltà bizantina dal IV al IX secolo* (Bari, 1977), pp. 287-323, who suggests

(p. 319) that Anicia Juliana may have acquired a taste for things Persian from her husband Areobindus, who had served on the Persian front.

64. A point made to me by Professor Mango.

65. For a discussion of mouldings in these other churches, see F. W. Deichmann, *Studien zur Architektur Konstantinopels* (Baden-Baden, 1956).

66. C. Mango, "The Church of Saints Sergius and Bacchus" (n. 35 above).

67. M. H. Torp, "Byzance et la sculpture copte de VIe siècle à Baouït et Sakkara," in A. Grabar et al., *Synthronon* (Paris, 1968), pp. 11-27; R. Kautzsch, *Kapitellstudien* (Berlin, Leipzig, 1936), nos. 630-32.

68. M. Kambouri, "Δύο κιονόκρανα της ἁγίας Σοφίας Θεσσαλονίκης," *Epistēmnikē Epetēris tēs Polutechnikēs Scholēs* 6 (1973), pp. 67-80; M. Kalligas, *Die Hagia Sophia von Thessalonike* (Würzburg, 1935), pp. 54-6, pl. V.

69. F. W. Deichmann, *Ravenna* II, 2 (1976), p. 107.

70. R. M. Harrison, "A Constantinopolitan Capital in Barcelona," *DOP* 27 (1973), p. 299, figs. 8, 9; I. Barnea, "Deux chapiteaux byzantins de Tomis," in *Χαριστήριον εἰς Ἀ. Κ. Ὁρλάνδον*, I (Athens, 1966), pp. 383-7.

71. Ivory: e.g., the diptych of Philoxenos issued at Constantinople in 525 (R. Delbrueck, *Die Consulardiptychen* [Berlin, 1926], pl. 31) has pendant and erect vineleaves very similar to those on the piers in Venice 6 a i and 6 a ii and might indeed long ago have been recognized as a clue to the latter's Constantinopolitan origin; also the diptych of Justin, issued at Constantinople in 540 (*ibid.*, no. 34; Weitzmann, AOS no. 51). Silver: e.g., the alternating naturalistic vineleaves and stylized palmettes on the border of a dish from the Kumluca Treasure (now dated by Dr. E. Cruikshank-Dodd to the 540s), illustrated in *Handbook of the Byzantine Collection* (Dumbarton Oaks, Washington, D.C., 1967), p. 18 (no. 63) and pl. 63. Agate: e.g., the Rubens Vase, Weitzmann, AOS no. 313, pl. X; *The Walters Art Gallery, Early Christian and Byzantine Art: An Exhibition Held at the Baltimore Museum of Art* (1947), no. 543.

72. Weitzmann, AOS nos. 107, 491; H. Torp, "Quelques remarques sur les mosaïques de l'église Saint-Georges de Thessalonique," *Pepragmena tou 9 Diethnous byzantinologikou Synedriou. Thessaloniki, 12-19 April 1953* I (Athens), pp. 489-98; A. Grabar, "A propos des mosaïques de la coupole de Saint-Georges à Salonique," *CA* 17 (1967), pp. 59-81; W. E. Kleinbauer, "The Iconography and Date of the Mosaics of the Rotunda of Hagios Georgios, Thessaloniki," *I'iator* 3 (1972), pp. 27-107.

73. The catalogue includes rectangular chancel-posts surmounted by colonnettes, which presumably carried an epistyle (see chap. 5, 14 c i, 14 c ii, 14 c iv).

74. Weitzmann, AOS, no. 272; E. Alföldi-Rosenbaum, "Portrait Bust of a Young Lady of the Time of Justinian," *Metropolitan Museum Journal* 1 (1968), pp. 19-40.

75. E. Alföldi-Rosenbaum, "Portrait Bust" (n. 74), p. 19, found "in the region of Constantinople"; Weitzmann, AOS

NOTES

no. 272, simply states "Constantinople, 1st quarter 6th century."

76. *Cod. Vind. Med. graec.* 1, fol. 6v. Comparison has been greatly assisted by the fine reproduction of this portrait on the poster for the 16th International Congress of Byzantine Studies, held in Vienna.

77. See C. Capizzi, "Anicia Giuliana (462 ca.–530 ca.). Ricerche sulla sua Famiglia e la sua Vita," *Rivista di Studi Bizantini e Neellenici* n.s. 5 (xv) (1968), pp. 191–226.

78. Malalas, *Chronographia* XVIII (Bonn ed., in *PG* 97), p. 478, lines 18–21.

79. C. Capizzi, "Anicia Giuliana" (n. 77 above), p. 217,

presents a romantic and wholly improbable picture of Anicia Juliana, without ambition, disillusioned, and reconciled to a subsidiary role.

80. See note 63. This is confirmed by the observations above, that the church had as its model biblical descriptions of the Temple of Solomon.

81. The passage is quoted in full in chapter 1.

82. *DOP* 15 (1961), 245. But see an article in *Okeanos* (*Harvard Ukrainian Studies* 7 [1983]), for the suggestion that Anicia Juliana may have been, by her bestowal of the ring, conferring legitimate succession upon Justinian.

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1. General View of Apse-platform during Construction of Underpass in Spring 1965, Looking North-west



2. General View of South-east Corner of Church in Spring 1965, Looking North-west



3. Central Area of Underpass in Spring 1965, Looking East



4. East Face of Underpass with Brick Vault, in June 1965



5. East Face of Underpass, with Foundations of Ashlar Wall and Northern Springing of Brick Vault



6. Springing of Brick Vault Laid against Ashlar Wall



7. Turkish Masonry with Spolia, and Brick Vault



8. South-east Corner of Large Building Immediately North of Brick Vault



9. East Face of Underpass with East Wall of Large Building North of Brick Vault



10. Underpass Capital 1



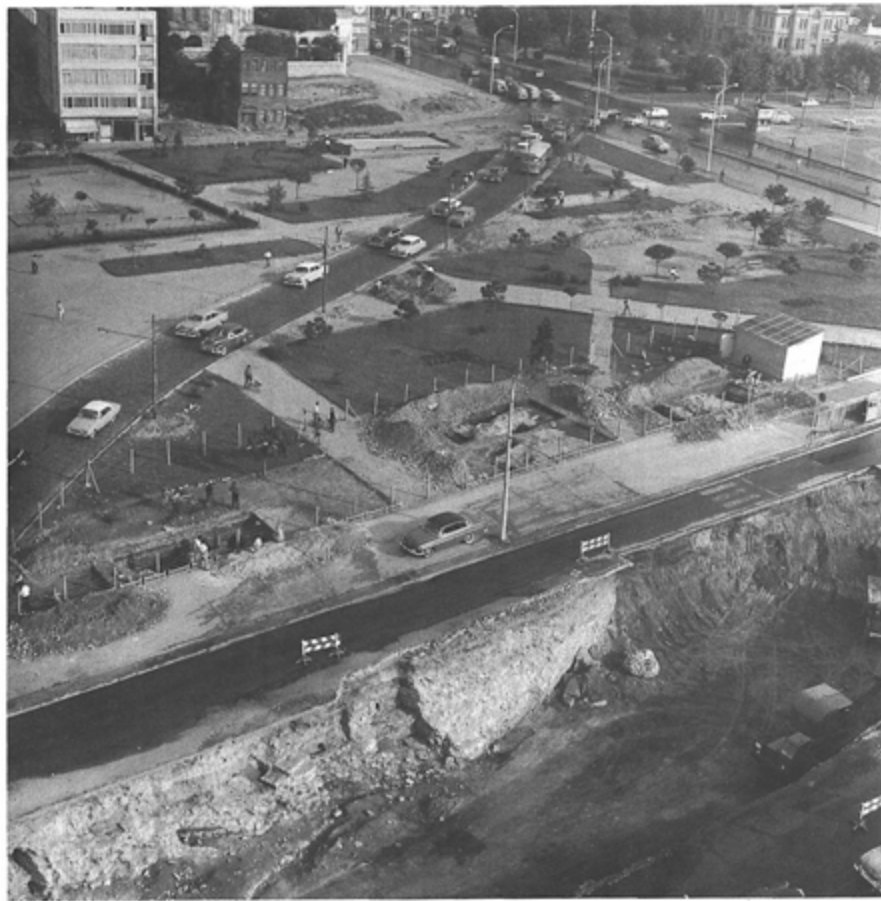
11. Underpass Capital 5



12. Underpass Impost 6



13. Underpass Decorated Limestone Block 17



14. General View in 1964,
Looking North-west



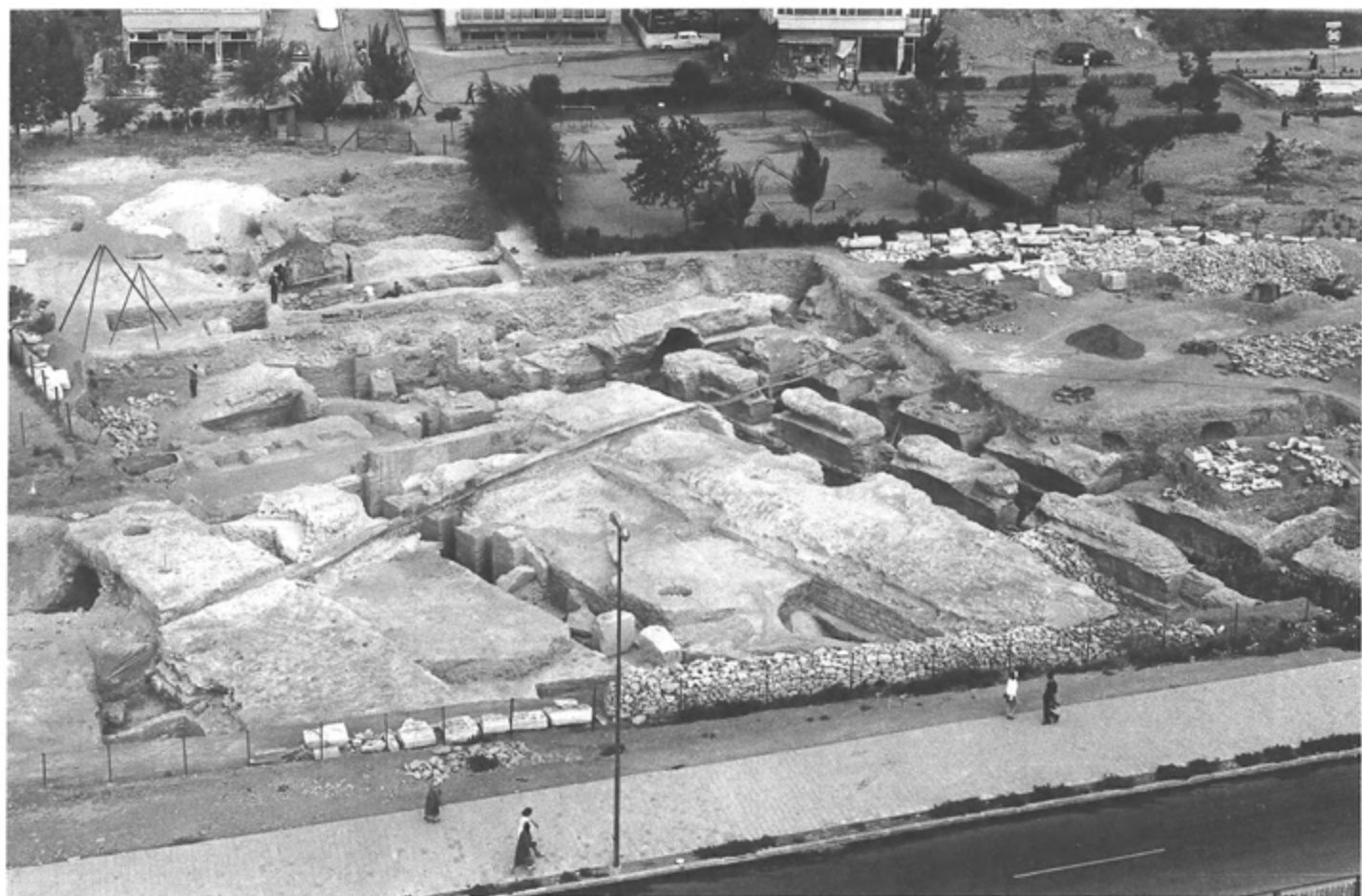
15. General View in 1968, Looking East across Site to Şehzade Camii and City Hall (Belediye Sarayı)



16. General View in 1965. Looking North-west



17. Crypt. Looking North-west



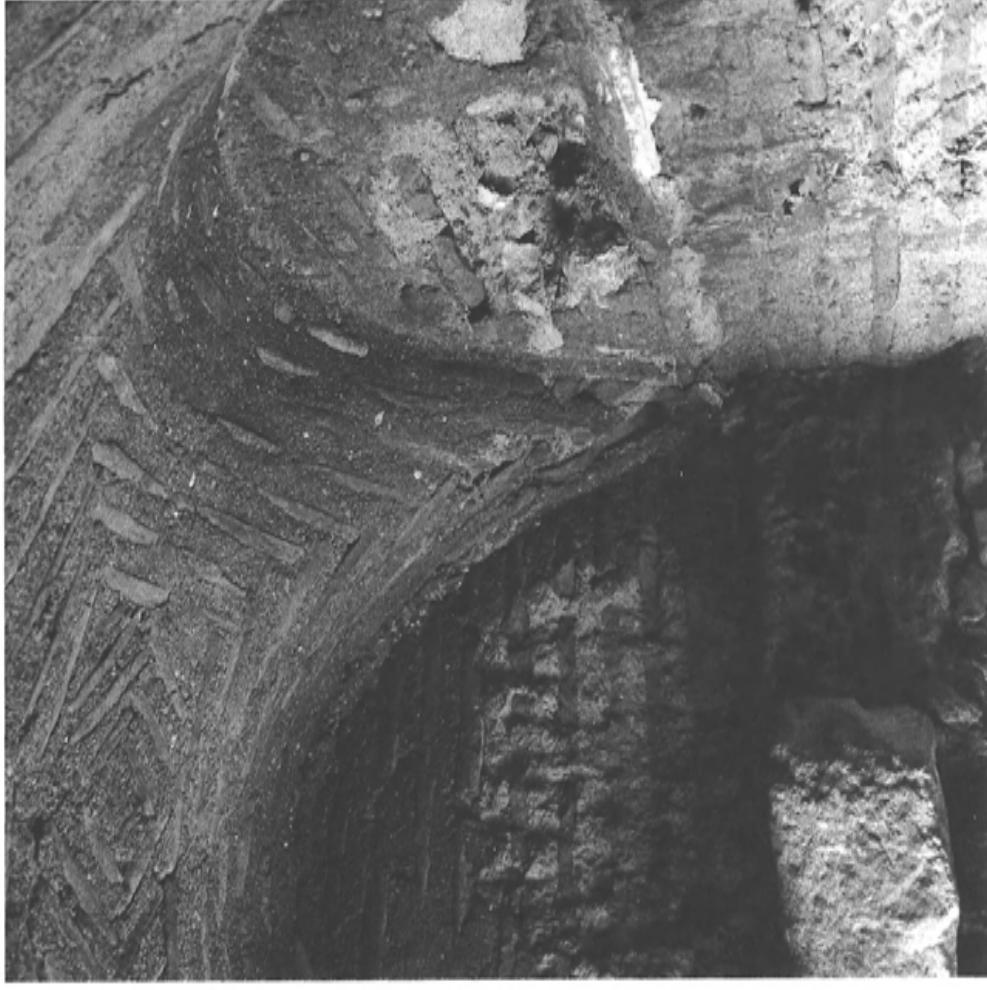
18. General View in 1967, Looking North-west



19. General View in 1968, Looking North-west



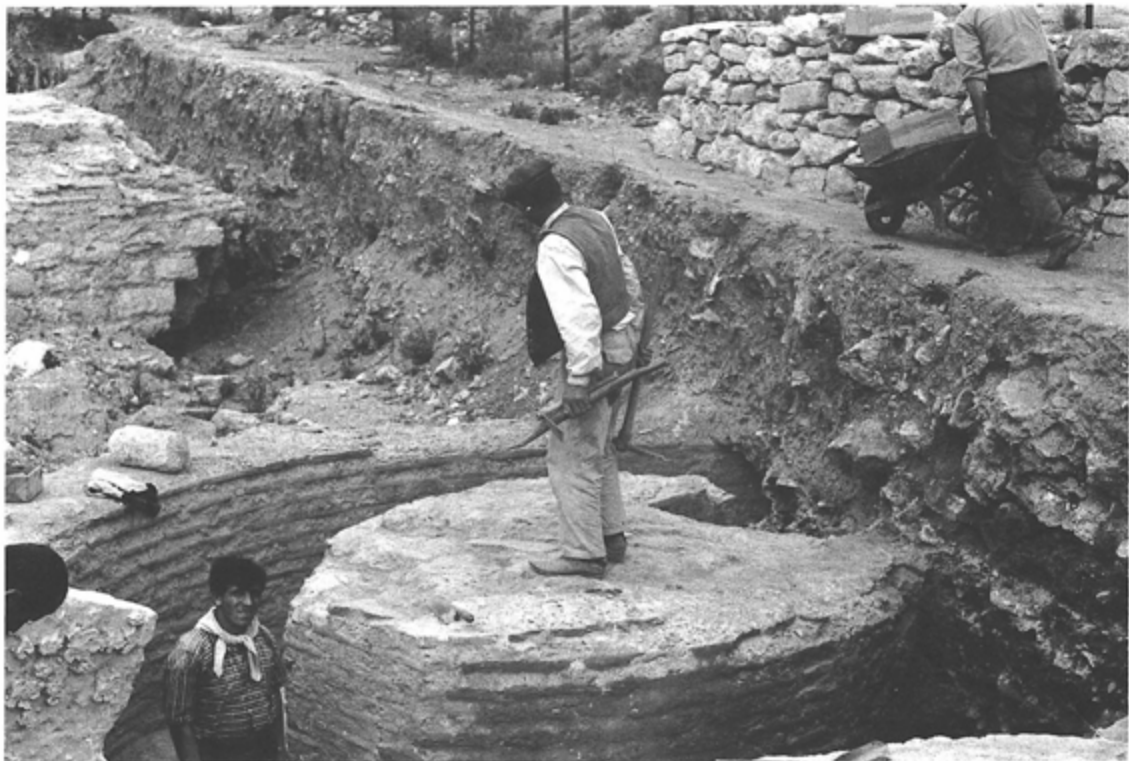
20. Northern Part of Square Chamber in North-eastern Sector, Looking East



21. North-western Corner of Cross-vaulted Bay in N/10



22. Trench in M/15-16, Looking South



23. Ambo(?) foundation, Looking North-east



24. View across Nave, with Ambo(?) foundation and Axial Passage, Looking South



25. Axial Passage, Looking East, with Pier-capital (5 b i) and Inscribed Block (1 a i) as Found



26. Axial Passage, Looking West, with Pier-capital (5 b i) and Inscribed Blocks (1 a i and 1 a ii) as Found



27. "Doorway" to Barrel-vaulted Passage in North-eastern Sector (L/9)



28. Trench in R/9-11, Looking South to Outer Face of Church's North Wall



29. Drain against Outer Face of Church's North Wall with Down-pipe (R/11)



30. (At left) North-western Corner of Northern Passage beneath North Aisle (U/13)

31. (Above) Transverse Wall in Western Sector of Northern Passage beneath North Aisle, Looking East (RS/12)



32. South-western Corner of Northern Passage beneath North Aisle (U/13)



33. Early Walls in Central Section of Northern Passage beneath North Aisle, Looking West (R/12)



34. (Above right) Western Sector of Northern Passage beneath North Aisle, Looking West



35. Southern Passage beneath North Aisle, Looking West



36. Western End of Axial Passage. Looking East from Narthex



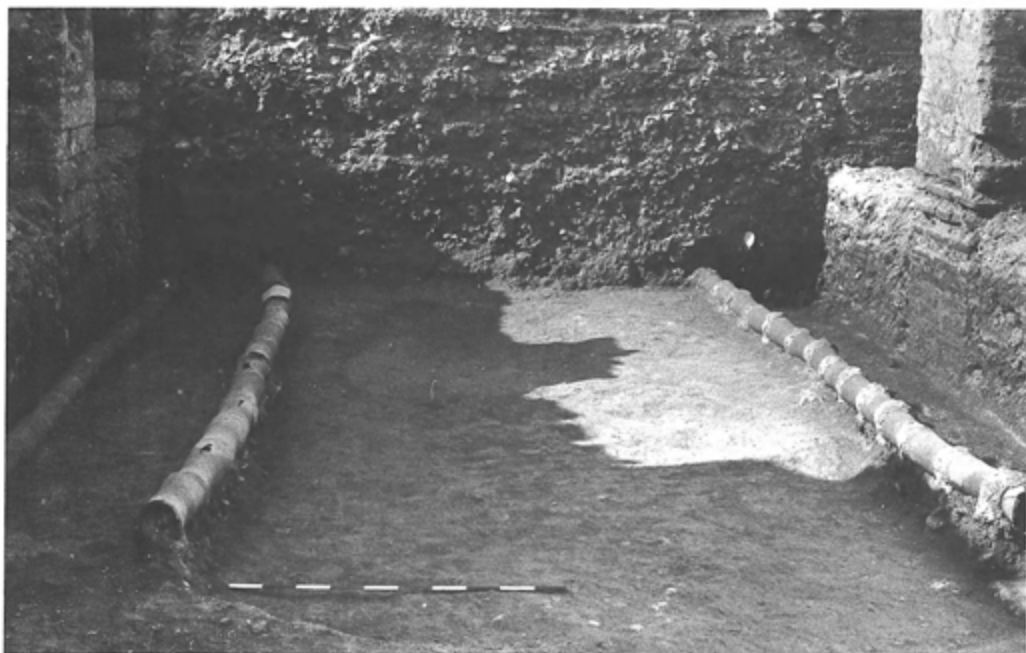
37. Narthex-substructure Looking North across Sounding in U/16



38. Narthex-substructure. Drain-pipe Slot in West Wall of Church (T/16)



39. Inner Face of Western Wall of Narthex



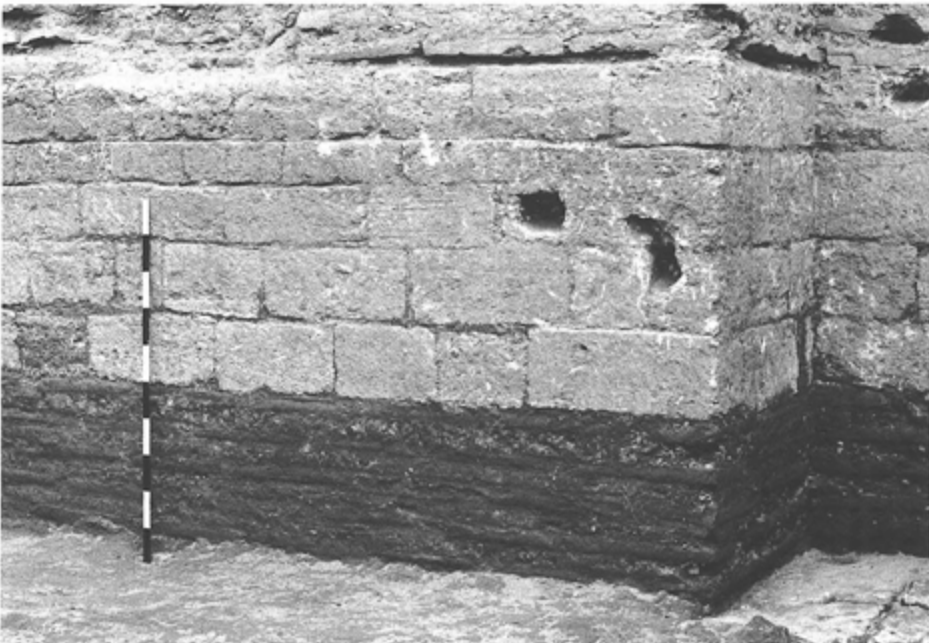
40. Drain-pipes in Narthex-substructure, Looking South



41. Larger Drain beneath Floor of Narthex-substructure, Looking South



42. Detail of Vaulting in Narthex-substructure



43. Detail of Masonry in Narthex-substructure



44. Detail of Masonry in Narthex-substructure



45. Northern Sector of Narthex-substructure, Looking North-west



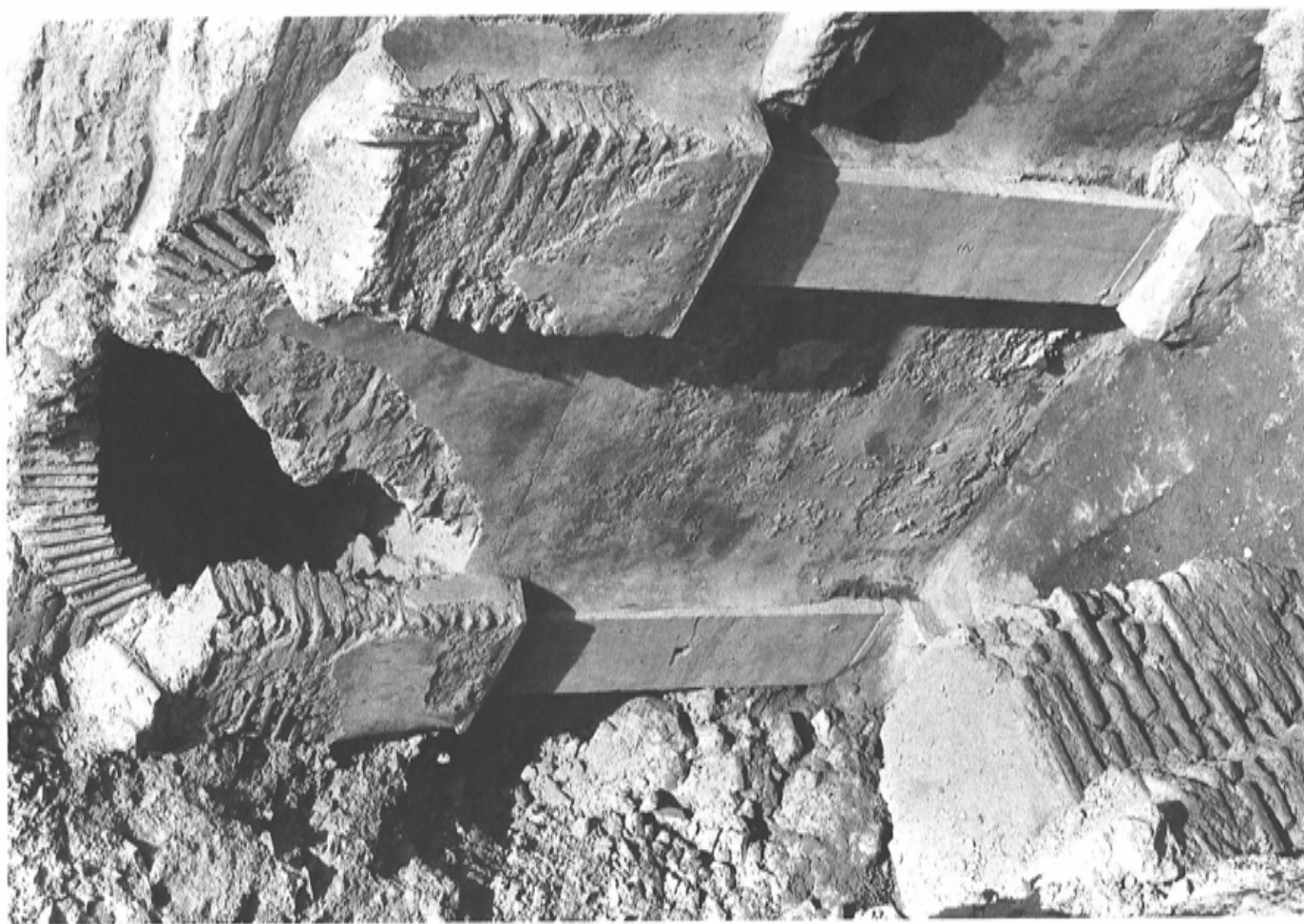
46. Northern Stair down from Atrium into Narthex-substructure (U/17)



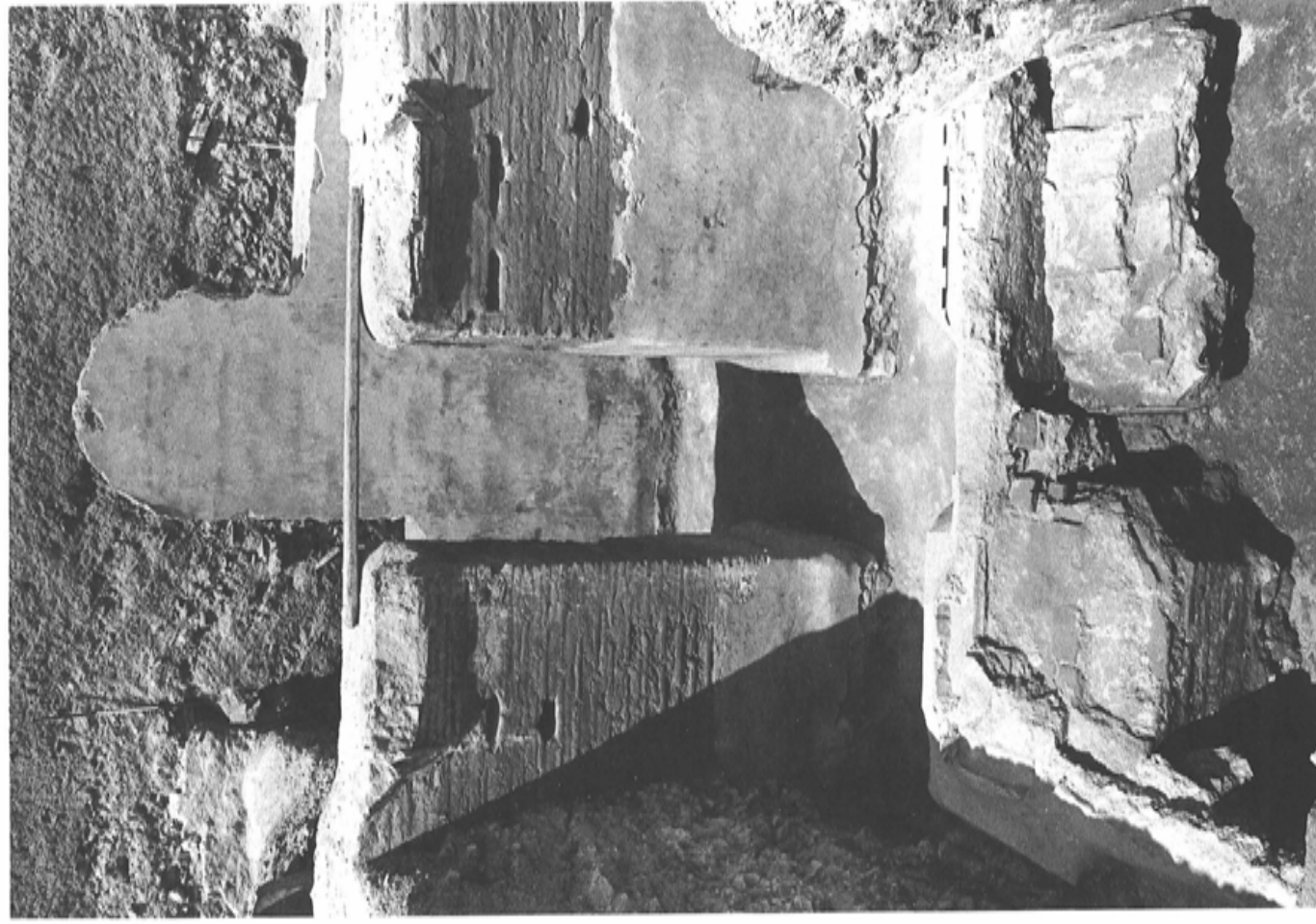
47. Intact Vault in Northern Sector of Narthex-substructure (V/13-14)



48. Cistern, Looking South



49. Pilasters at Eastern End of Cistern (W/14)



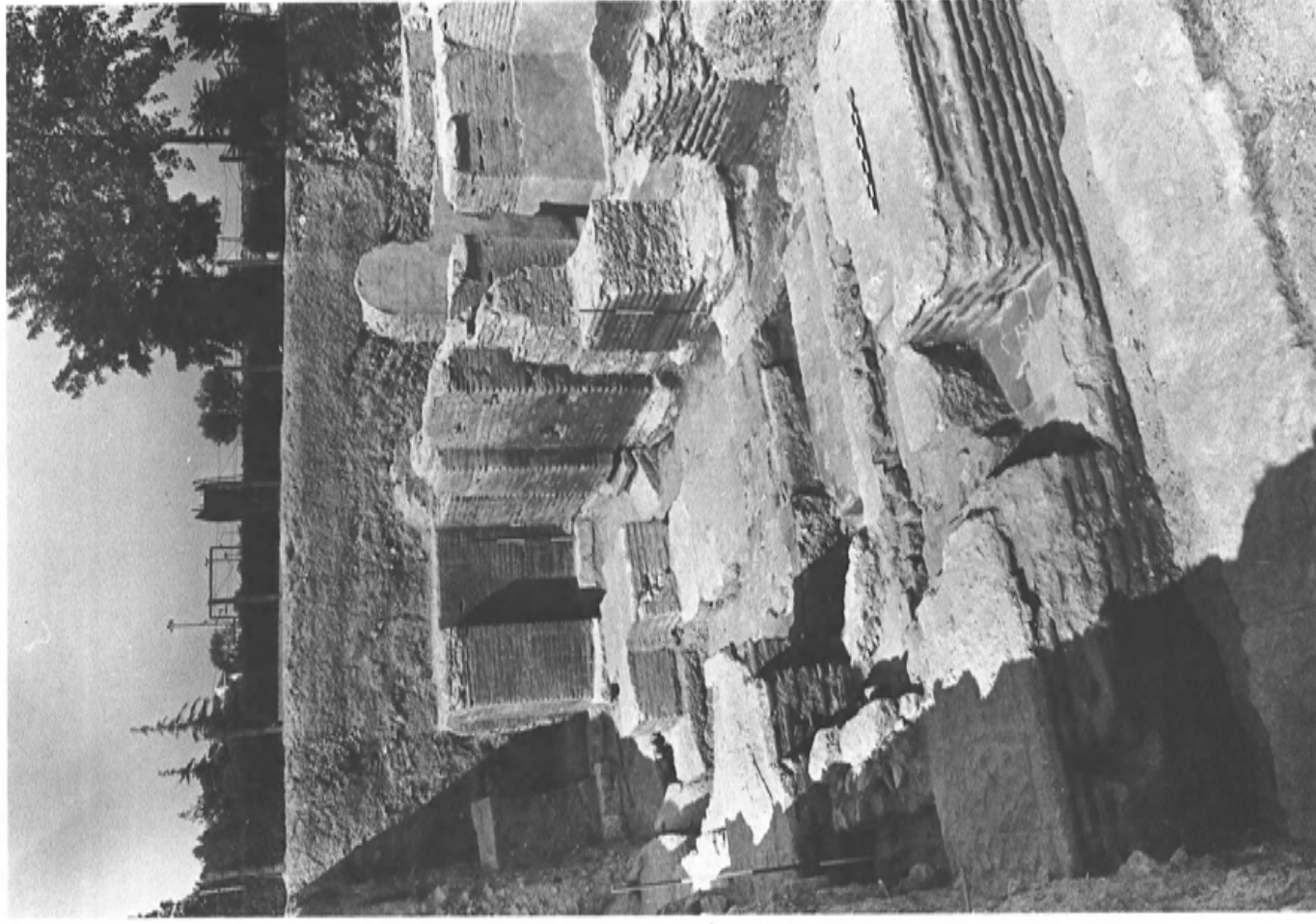
50. Central Room of Substructures of Apsidal Building in North-western Sector



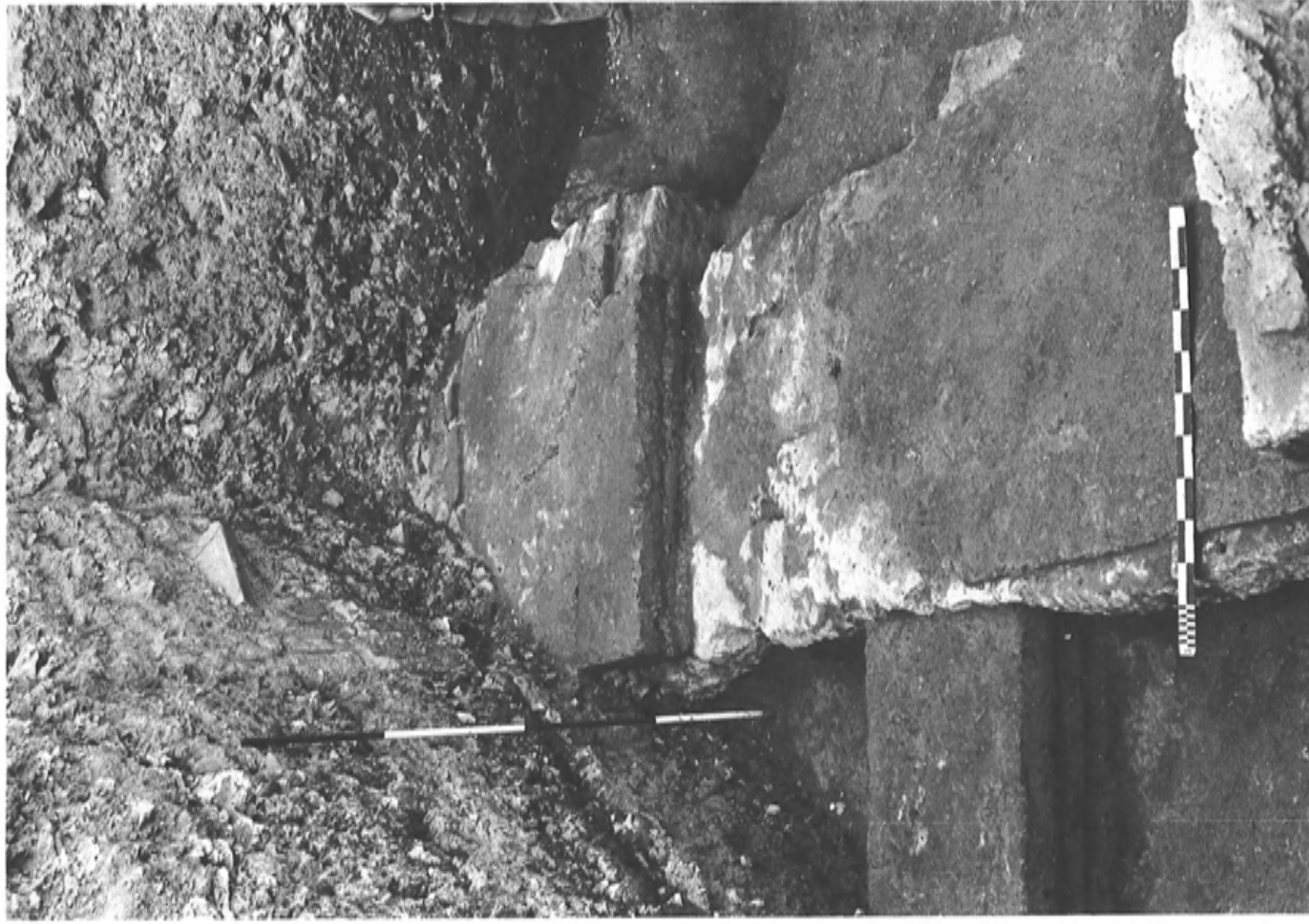
51. Detail of 50)



52. Robber-trenches in aa/15-16, Looking North-east



53. General View over Western End of North-west Sector, Looking North



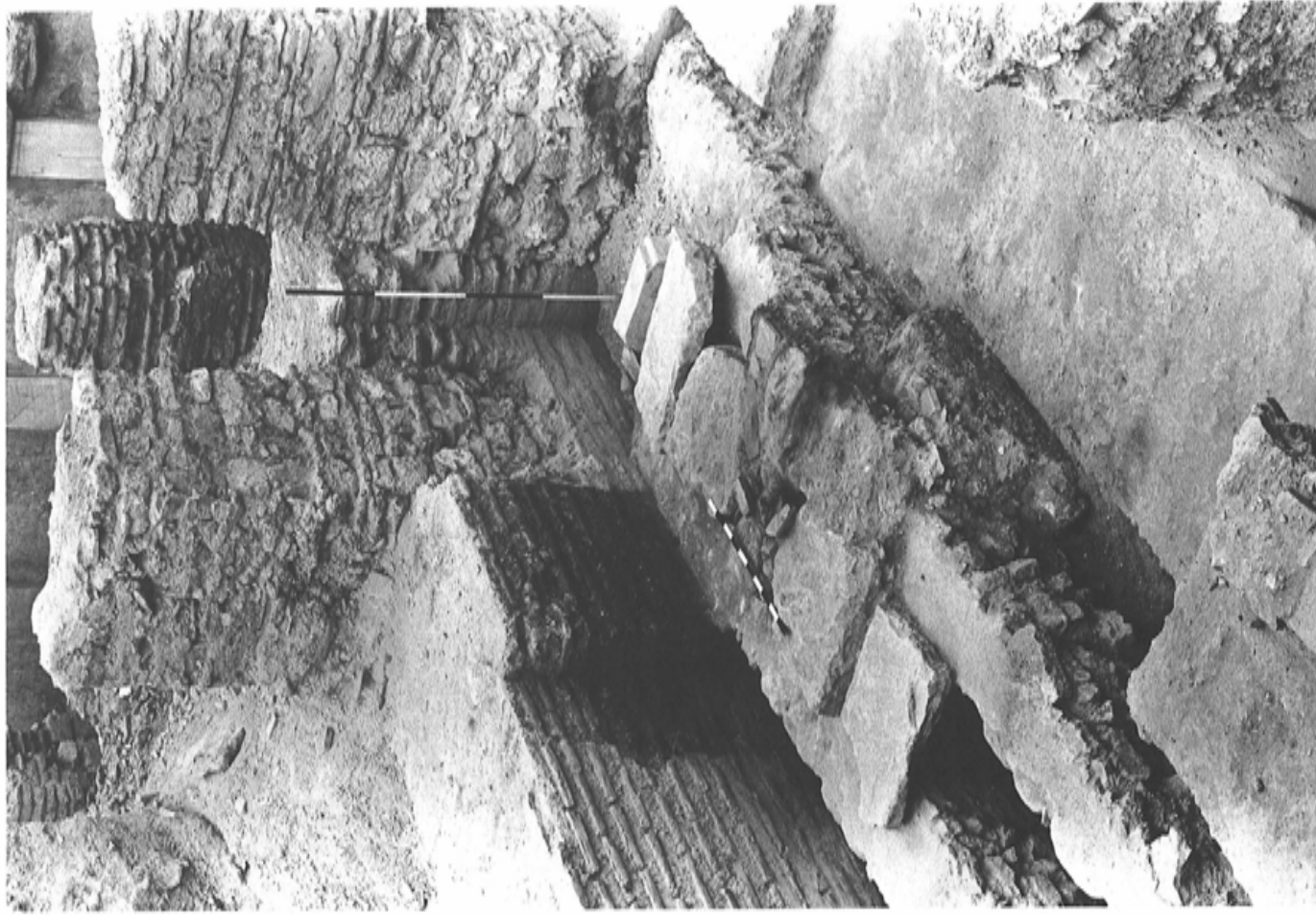
54. Footings of North-south Wall in bb/15, Looking North



55. Foundation-course of Wall Shown in 54, after Removal of Two Surviving Brick-courses, Looking South



56. Trench Y/15-16, Looking North



57. Southern Walls of North-western Complex, Intervening Drain, and Secondary Blocking, Looking North-east from Y/16



58. South-west Corner of North-western Complex, Looking North-east



59. West Wall of North-western Complex, Looking South



60. General View over North-western Complex and Atrium, Looking South-east



61. General View over North-western Complex, Looking East



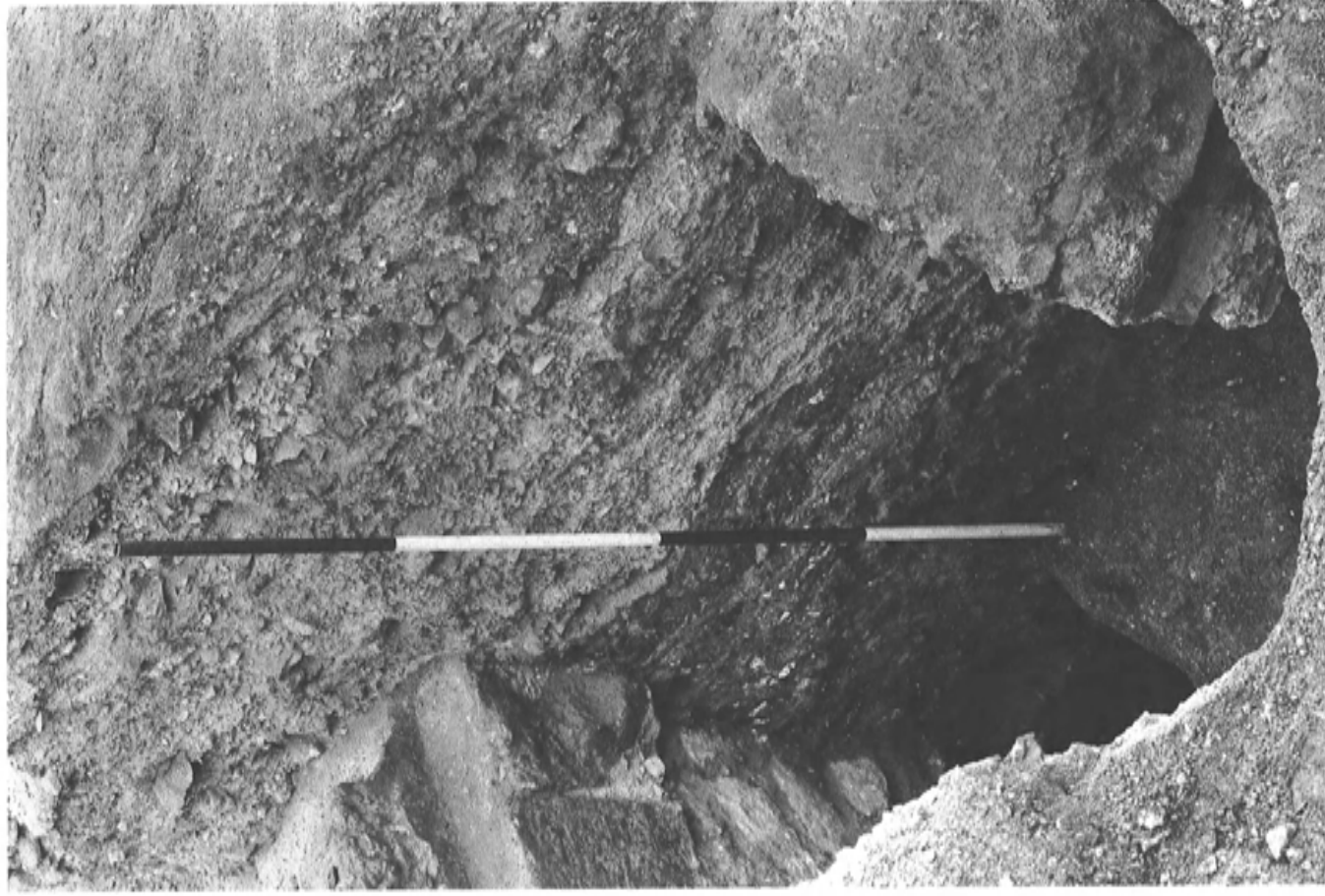
62. North-western Complex during Excavation, from South



63. Southern Walls of North-western complex and (on right) Early Wall beneath Level of Atrium-pavement



64. View of North-western Complex and Sounding in XY/17



65. Detail of Sounding in XY/17 Showing Two Early Walls beneath Level of Atrium-pavement



66. Staircase-foundation and Atrium-pavement in V/17, Looking South



67. Staircase-vault, Looking North-west



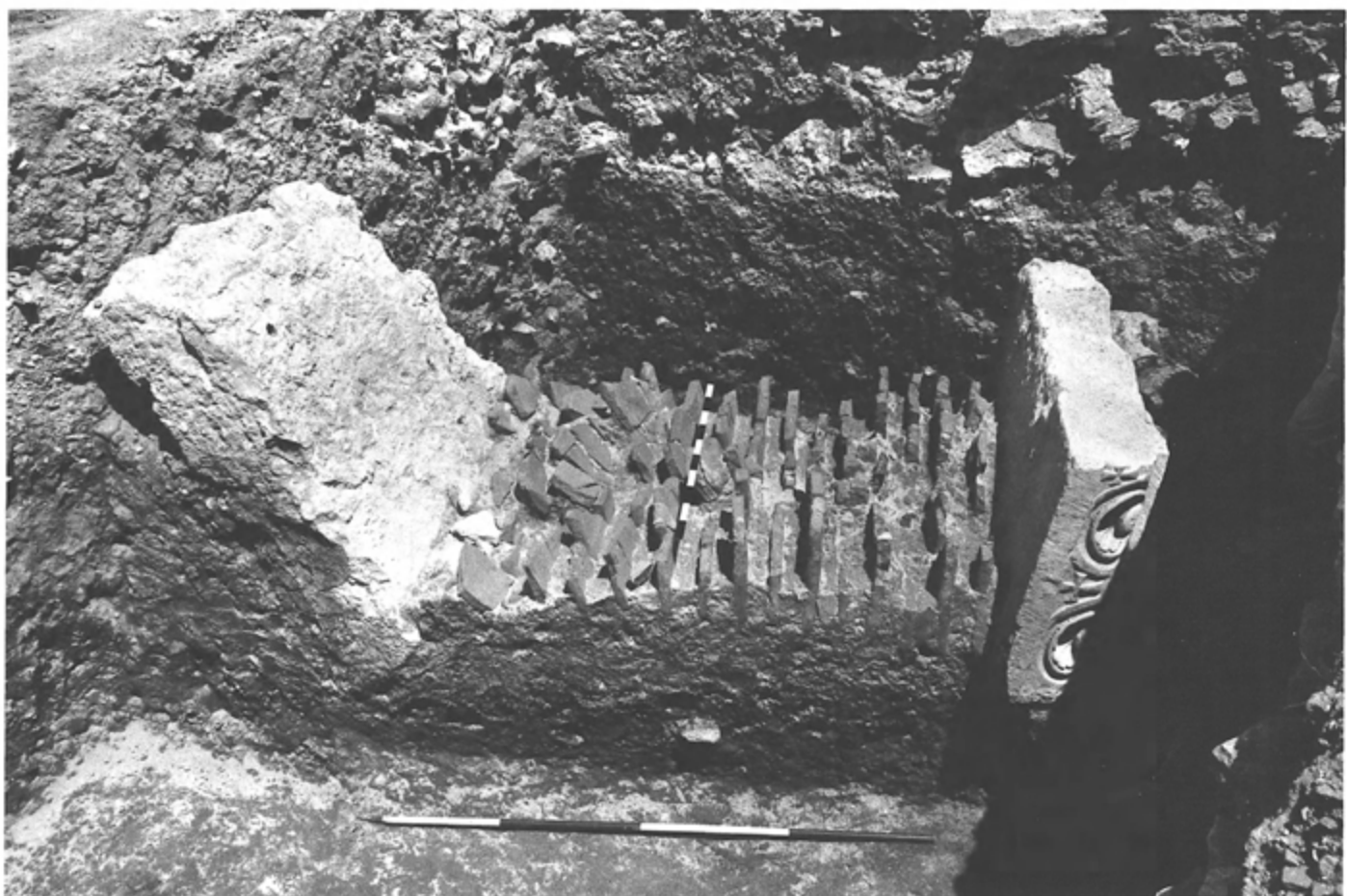
68. North Side of Trench in W/18, with Atrium-pavement and Staircase Foundation



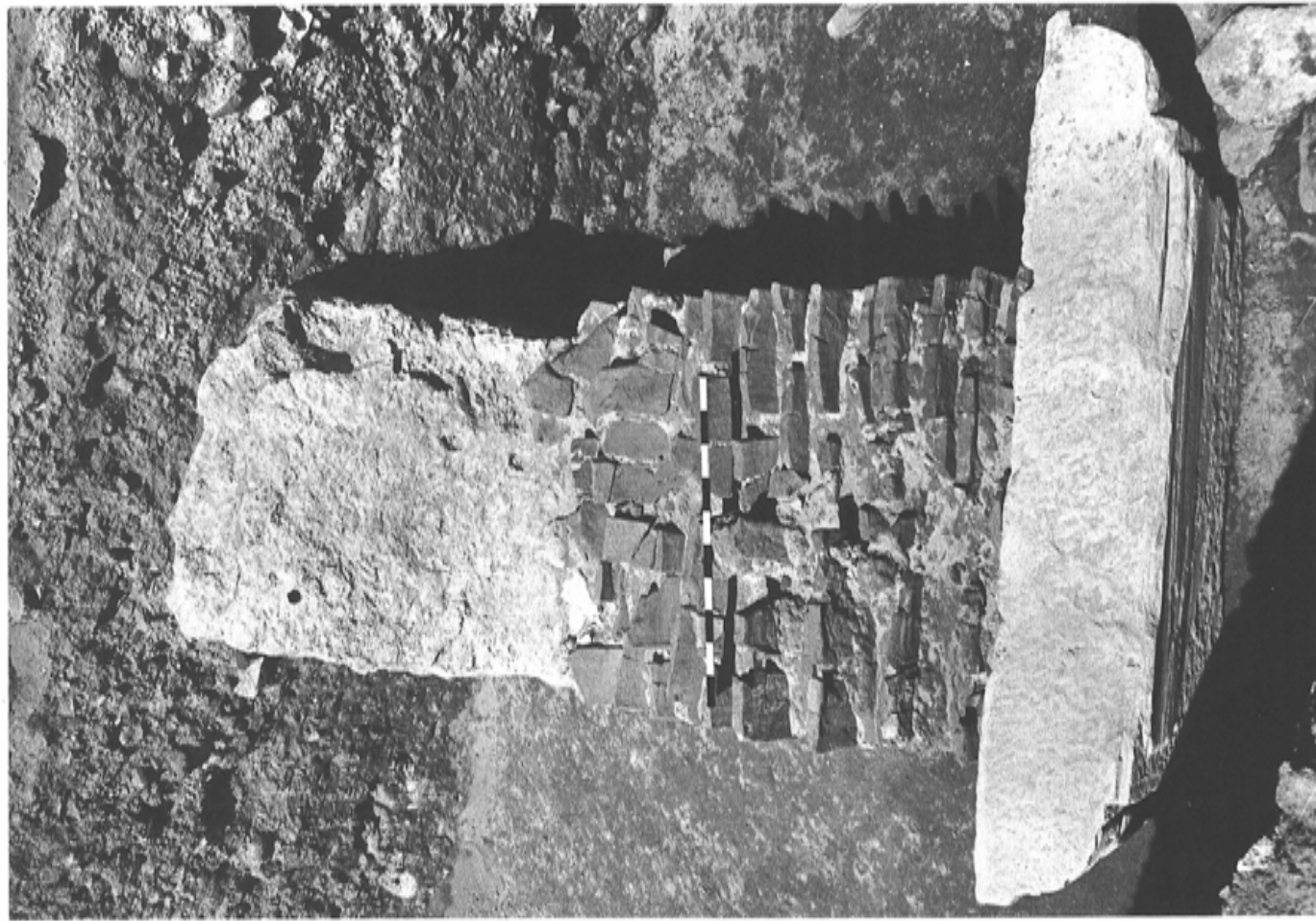
69. General View East from Z/19, Showing Elements of Fallen Pier and Atrium-pavement



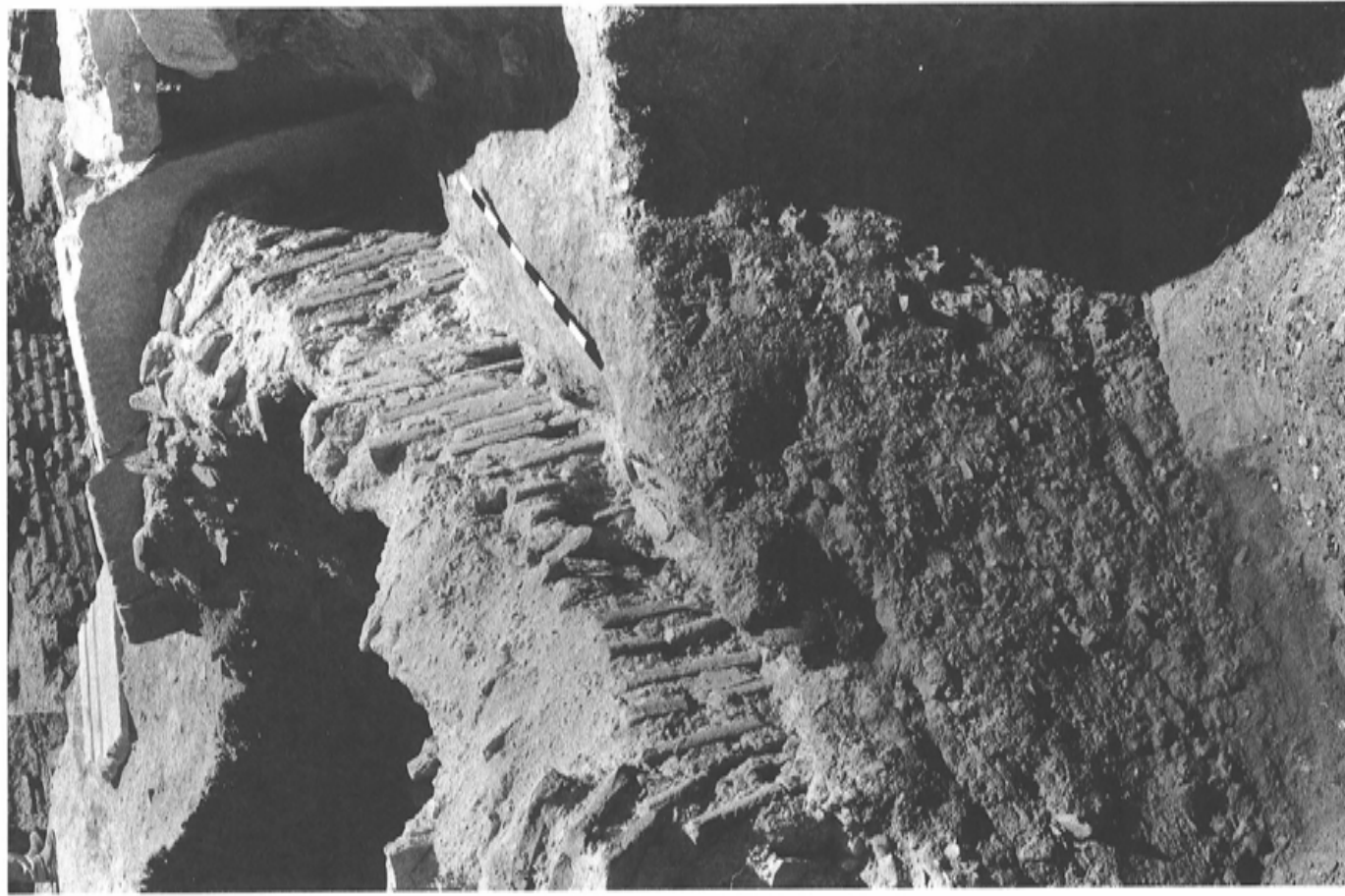
70. General View of Northern Part of Atrium, Looking South over Burials 25-27 to Fallen Pier, Atrium-pavement, and Staircase Foundation



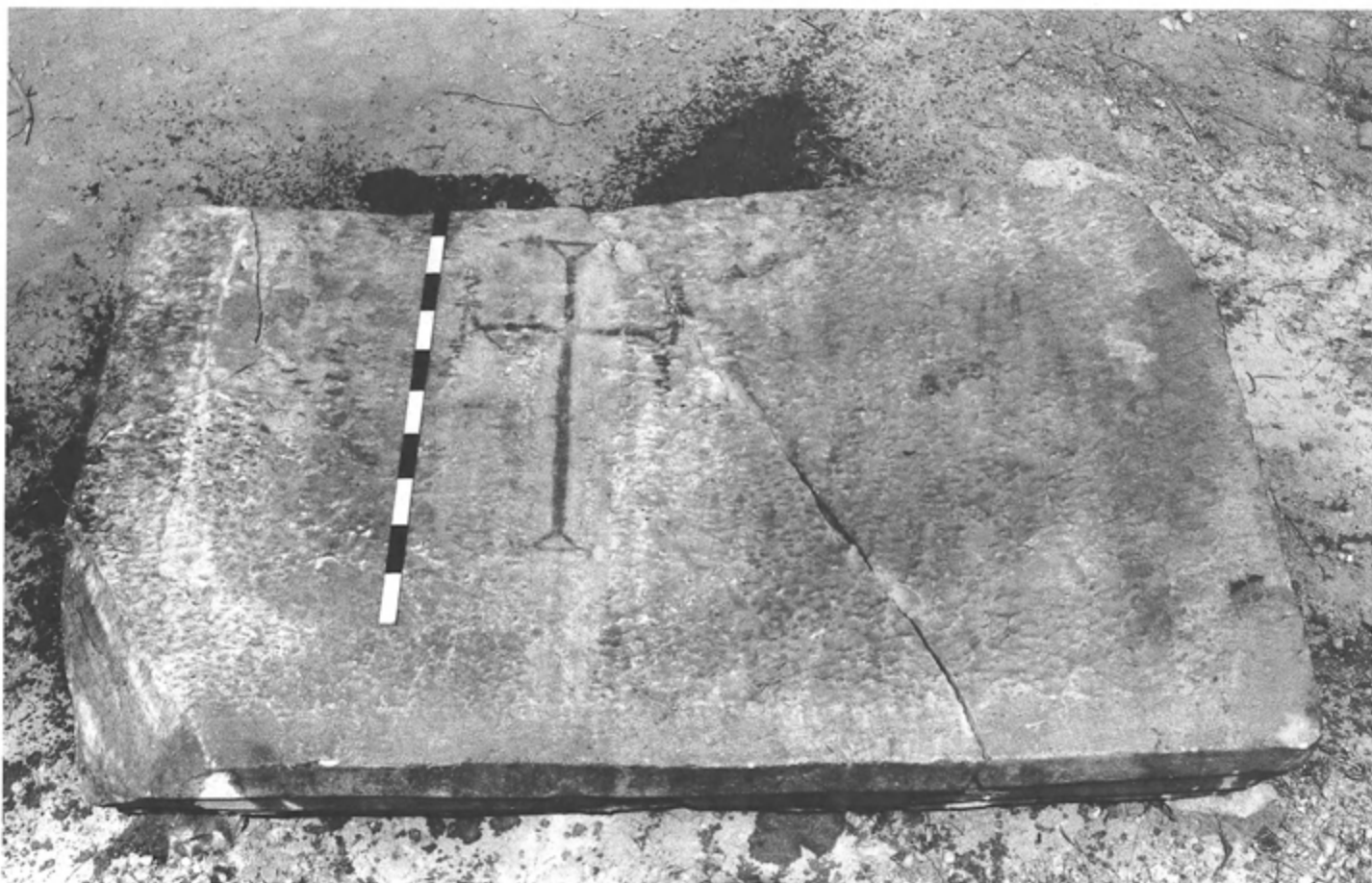
71. Upper Part of Fallen Pier (Y/18), Looking North



72. Fallen Pier, Looking West



73. Lower Part of Fallen Pier (X/16), Looking East



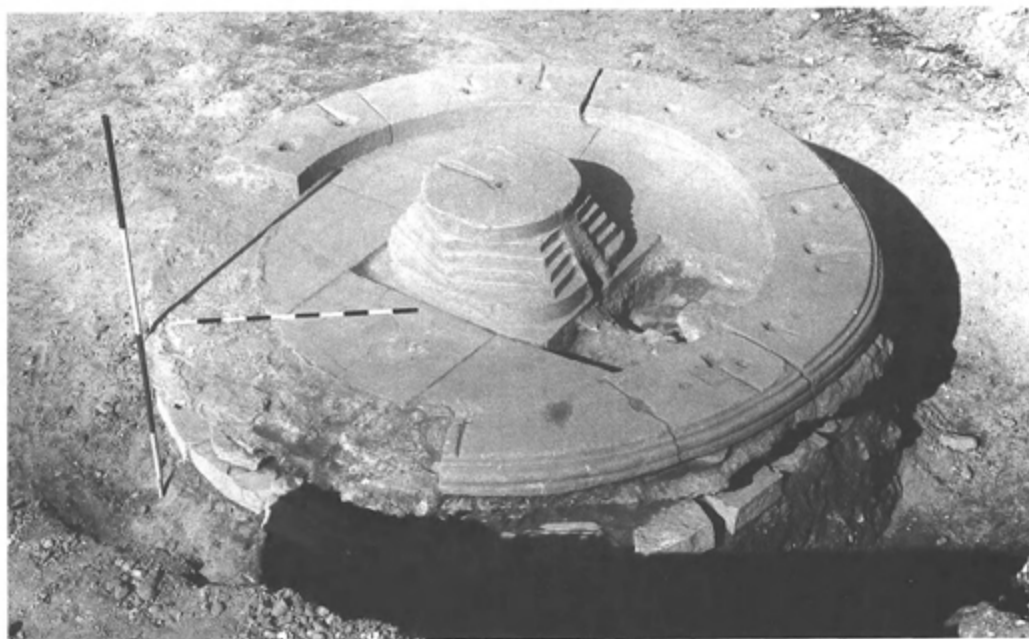
74. Marble Slab from Fallen Pier, with Painted Cross



75. Beam-slot in Fallen Pier



76. Circular Feature in X/19,
Looking South



77. Circular Feature from above,
Looking North



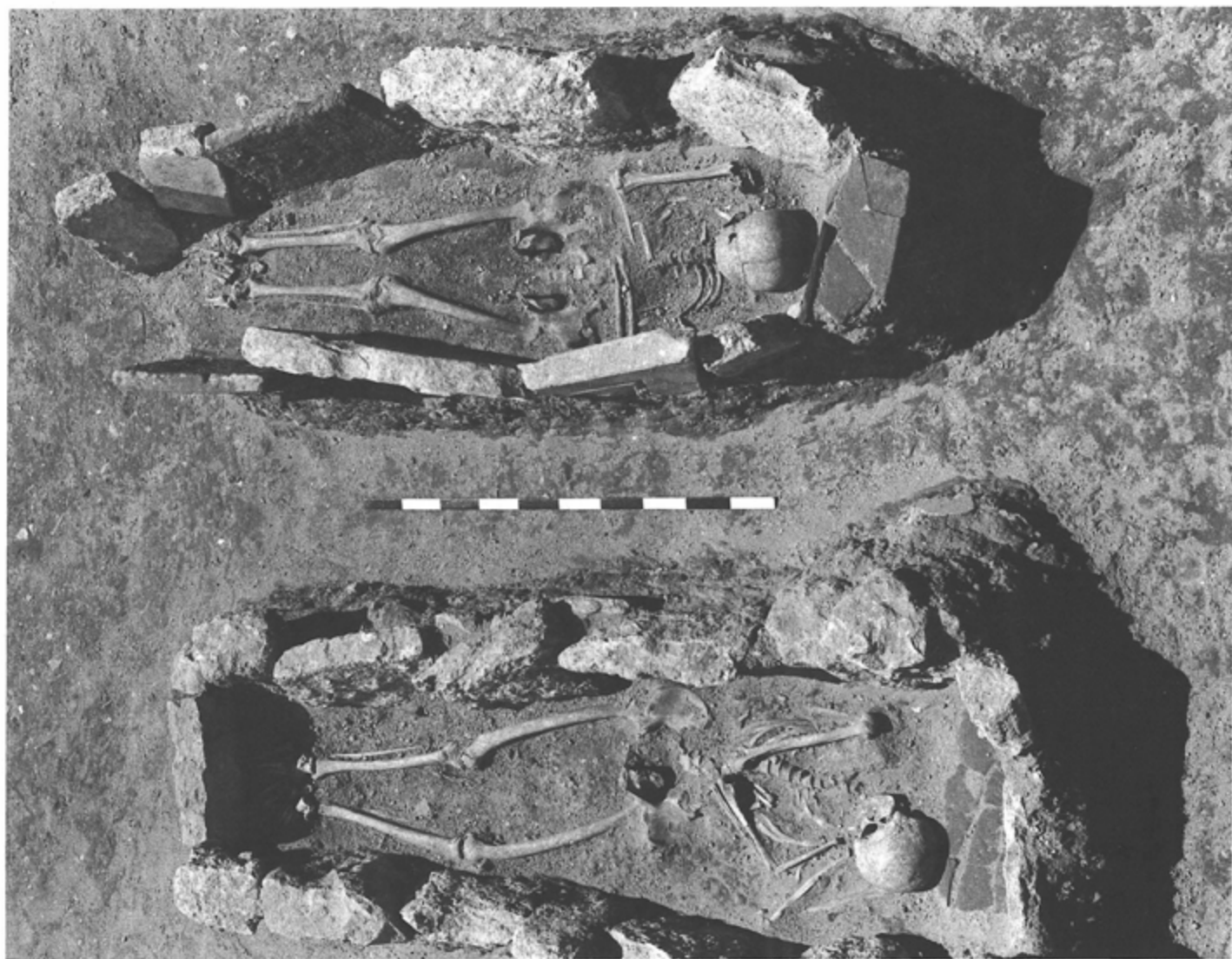
78. Circular Feature, after
Removal of Plinth



79. Burials (from left to right) 25, 26, 27



80. Burial 22



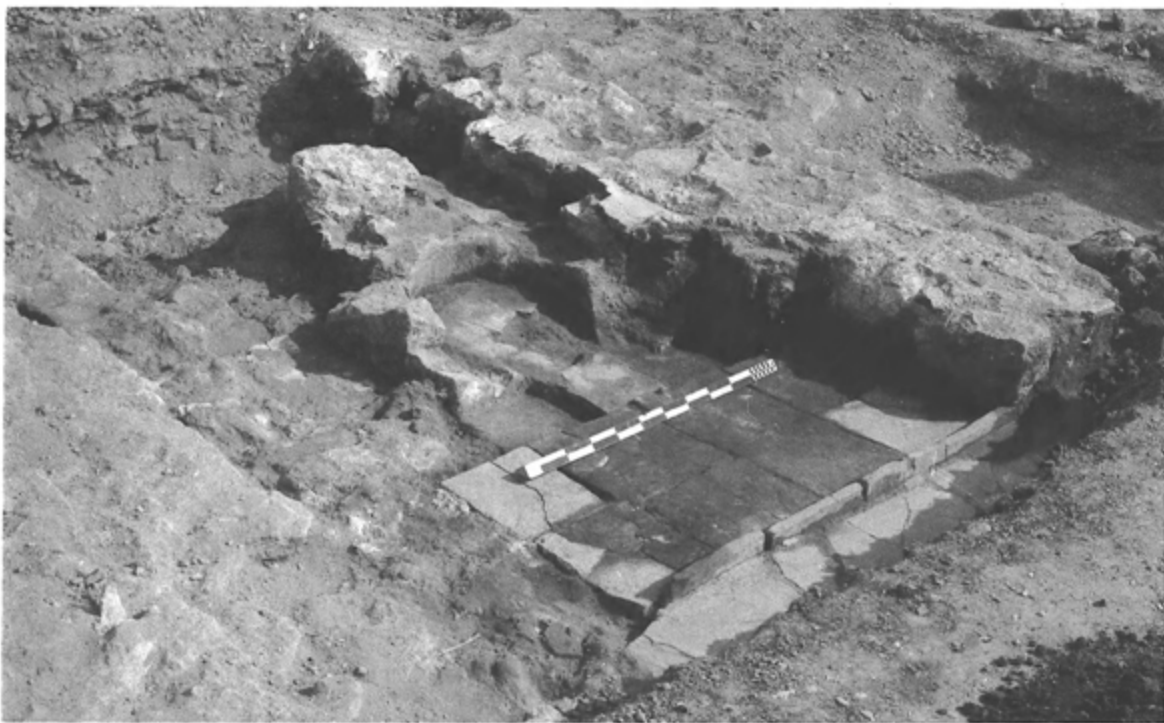
81. Burials 37 (above) and 36 (below)



82. Burial 46, Overlying Bottom Step of Atrium-staircase



83. Burial 111, Heap of Mixed Bones in Z/13



84. Foundations of Turkish Bath (Konak hamamı) in M/18, Looking South-east



85. Turkish Timber-laced Foundation in U/12, Looking North-east



86. Pit I (X/12-13), Looking South-east



87. Great Entablature, Corner-block 1 a i



88. Great Entablature 1 a i, Face with Diagonal Lattice and Arch-springing



89. Great Entablature 1 a i, Face with Twisting Vinestem



90. Detail of 1 a i



91. Great Entablature, Niche 1 a ii, with Twisting Vinestem



92. Fragmentary Block with Peacock and Decorated Soffit, Joining 1 a ii



93. Great Entablature, Arch 1 a iii



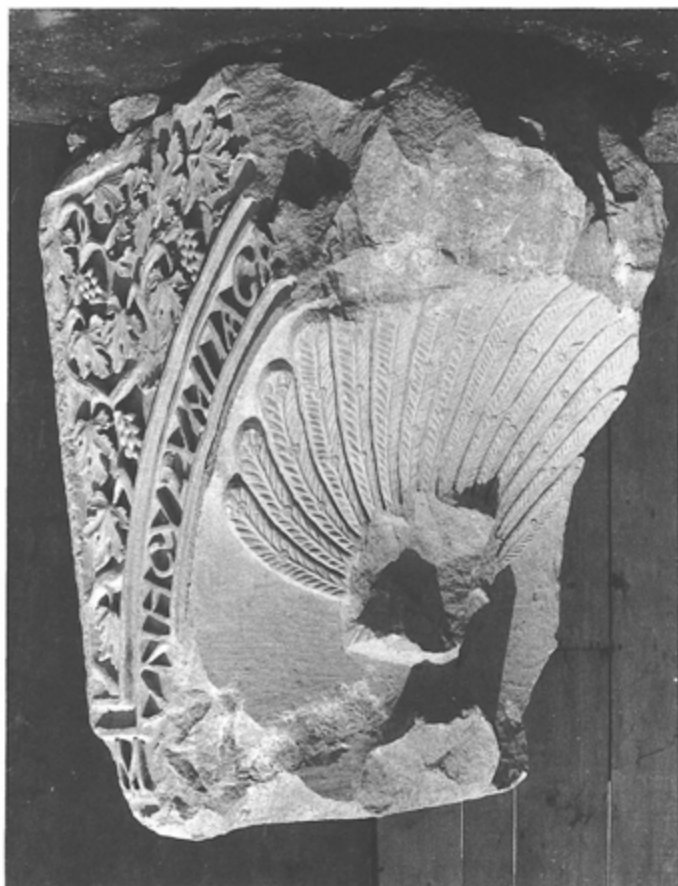
94. Great Entablature, Corner-block 1 a iv, Face with Twisting Vinestem



95. Great Entablature 1 a iv, Face with Diagonal Lattice



96. Great Entablature, Arch 1 a v



97. Great Entablature, 1 a v



98. Great Entablature, Niche 1 a vi



99. Great Entablature, Arch 1 a vii



101. Rear View of Arch 1 a v



102. Arch 1 a v from Below, Showing Curvature of Decorated Face



100. Detail of 1 a vii



103. Rear View of Arch 1 a vii



104. Fragment of Inscription, 1 a ix



105. Fragment of Inscription, 1 a x



106. Fragment of Inscription, 1 a viii



107. Neck of Peacock, 1 d i



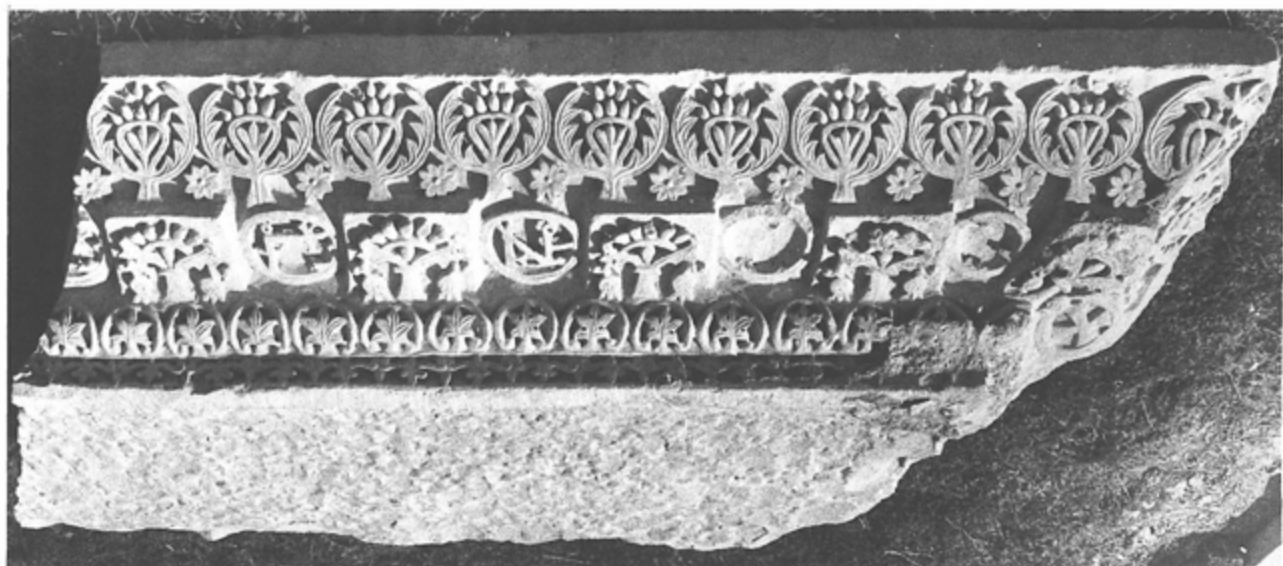
108. Peacock-body, 1 b iii



109. Right Eye of Peacock, 1 e ii



110. Claws of Peacock, 1 c i



111. Cornice 2 a i



112. Detail of 2 a i



113. Cornice 2 a ii



114. Cornice 2 b i, Right-hand End



115. Cornice 2 b i, Central Block



116. Cornice 2 b i, Left-hand Block



117. Cornice 2 b ii, Fragment Joining Above



118. Cornice 2 b iii



119. Detail of Monograms on 2 b iii



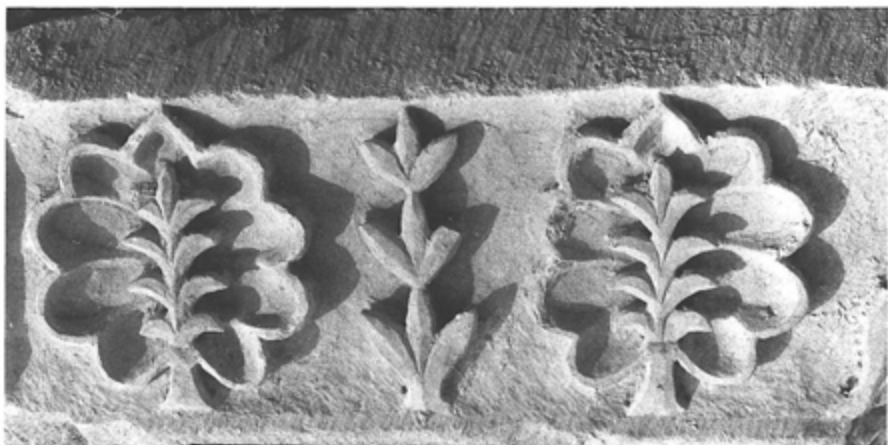
120. Detail of Monogram on 2 b i



121. Cornice 2 c iv



122. Cornice 2 d i



123. Detail of 2 d i



124. Cornice of 2 i i



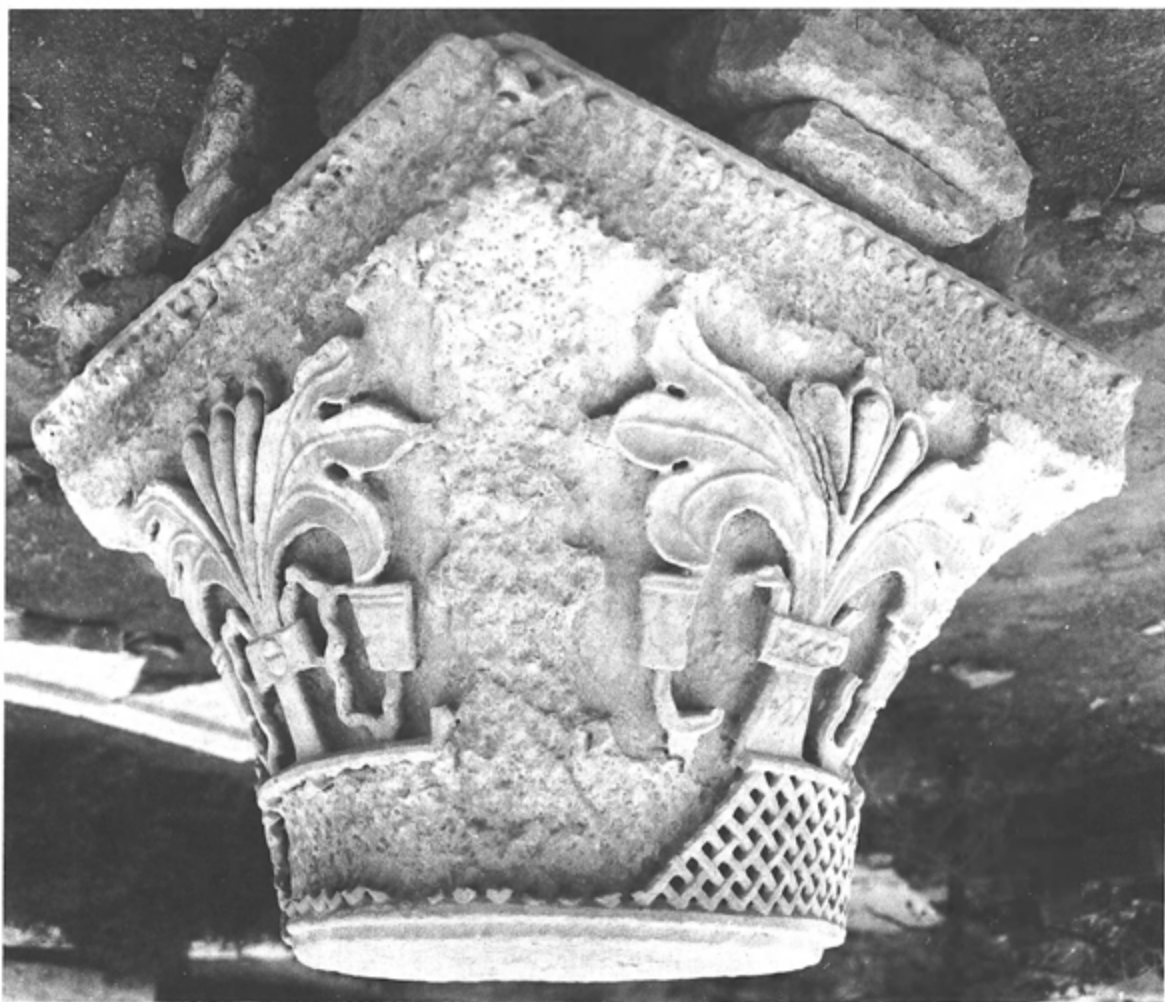
125. Cornice 2 f ii



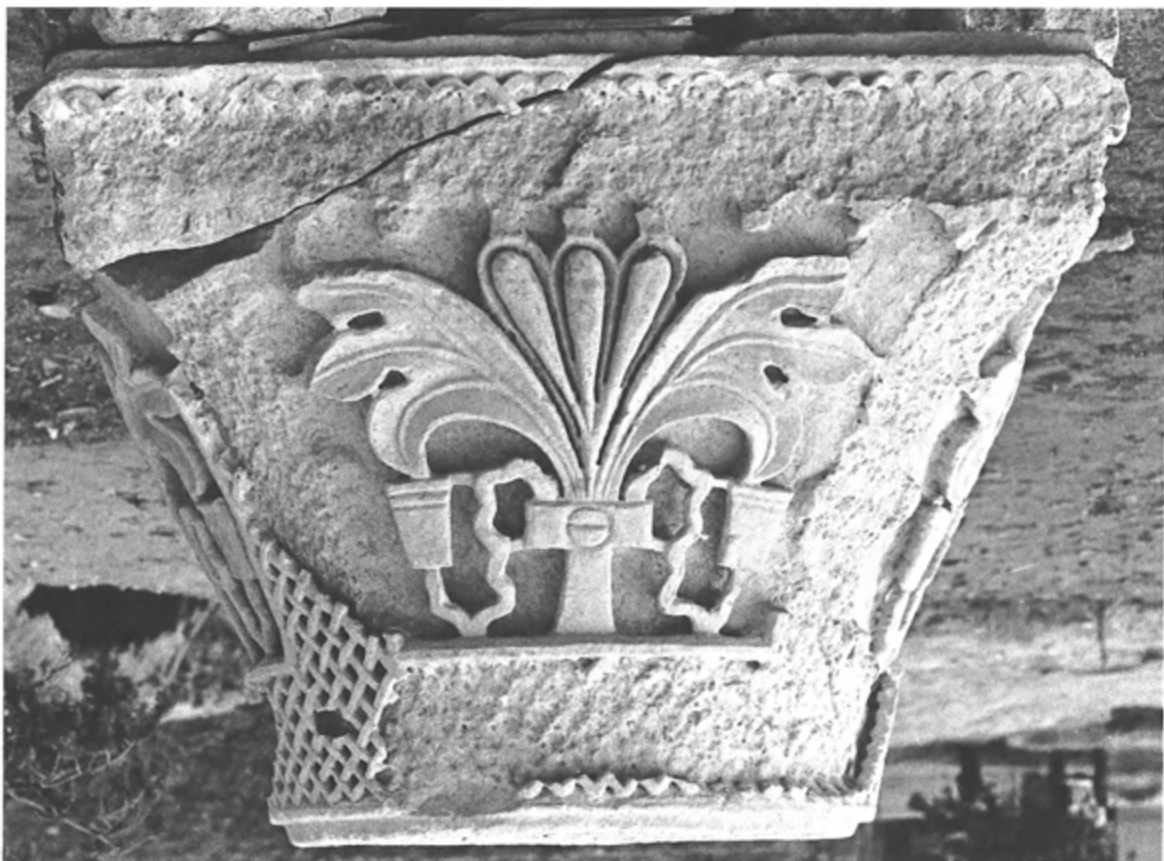
126. Cornice 2 e i



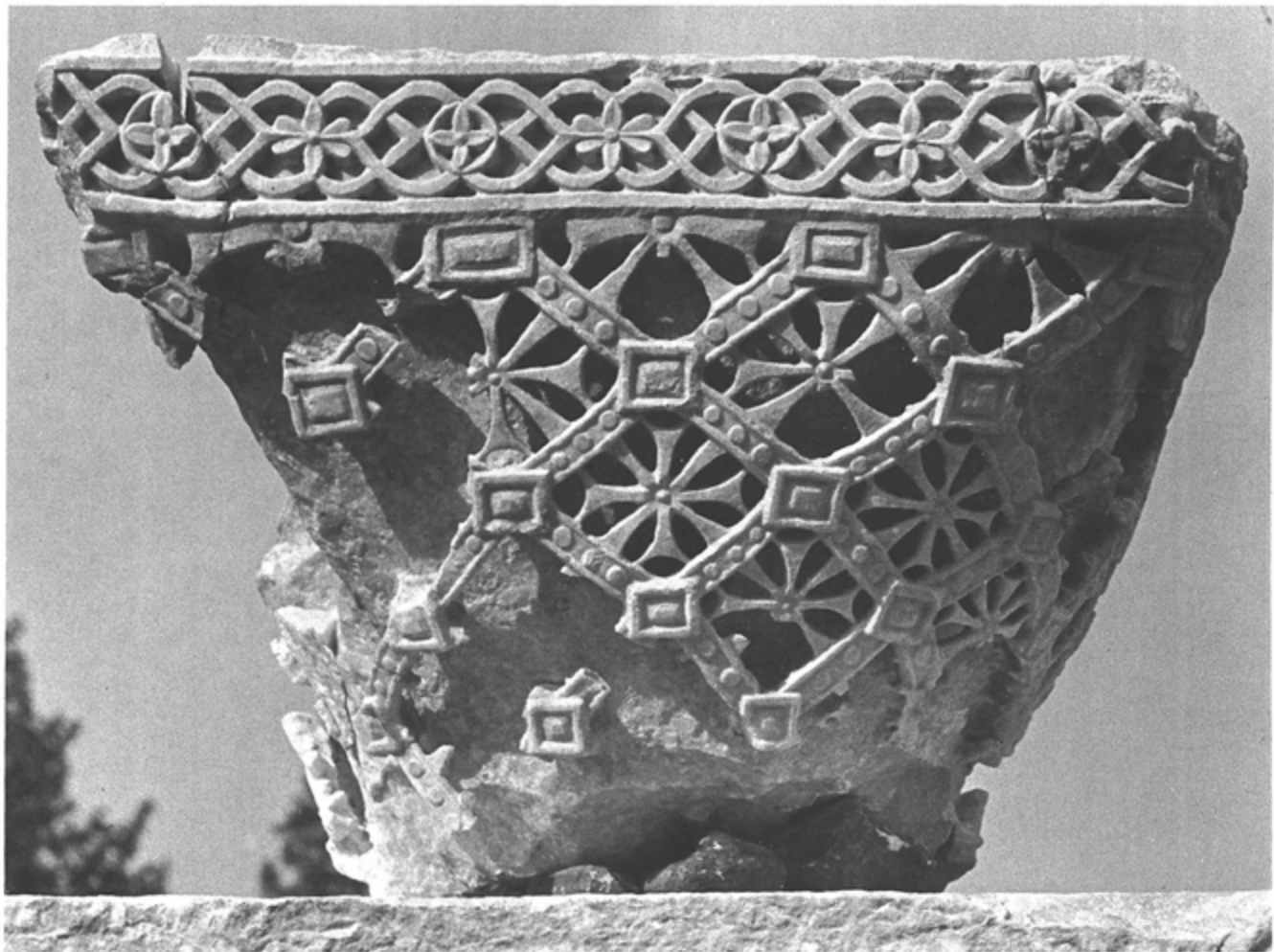
127. Impost 2 g i



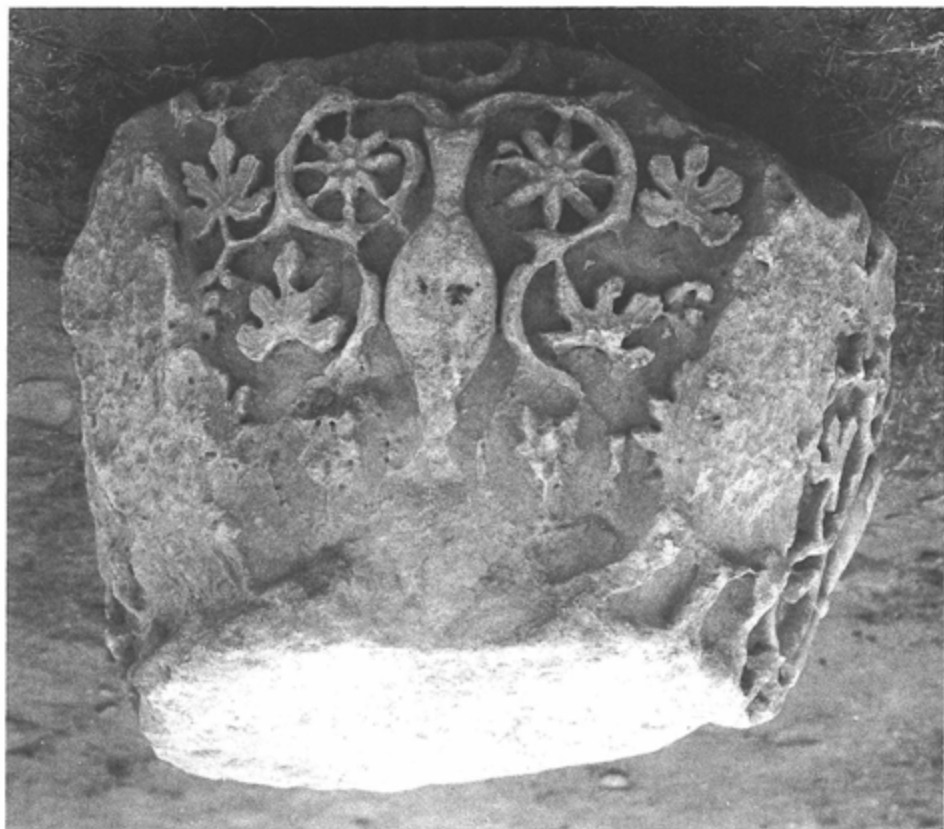
128. Basket-capital 3 a i



129. Basket-capital 3 a i



130. Basket-capital 3 b i



131. Basket-capital 3 c i



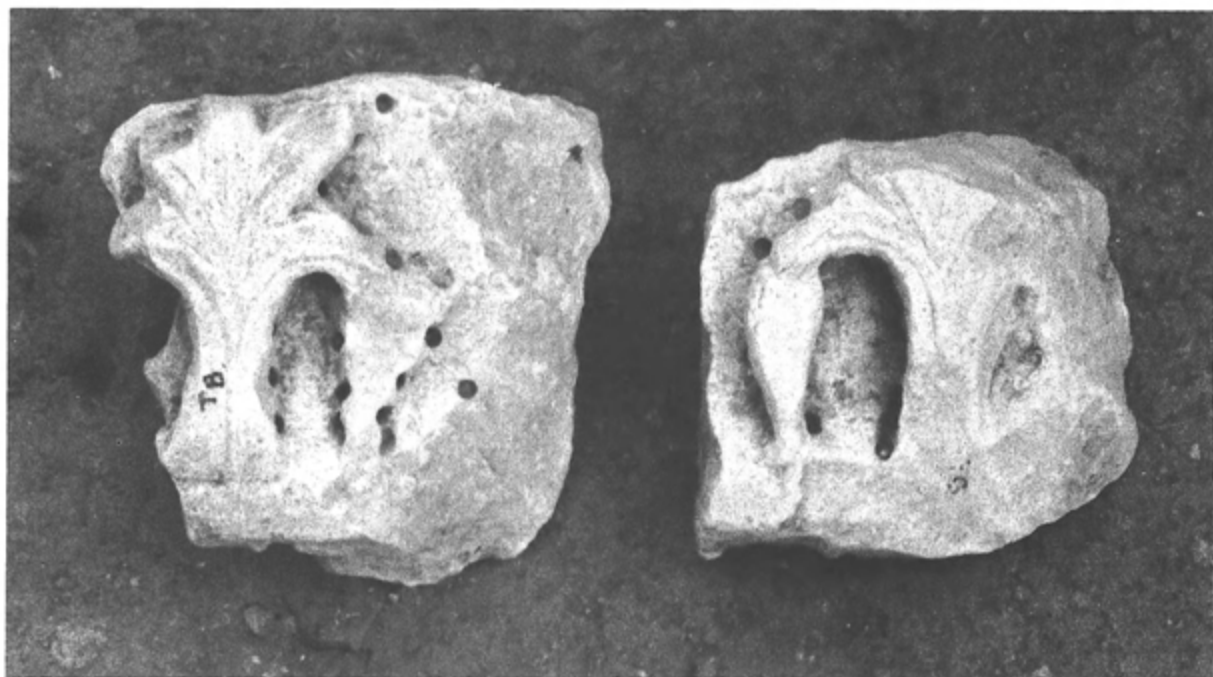
132. Capital in Barcelona, 3 d i



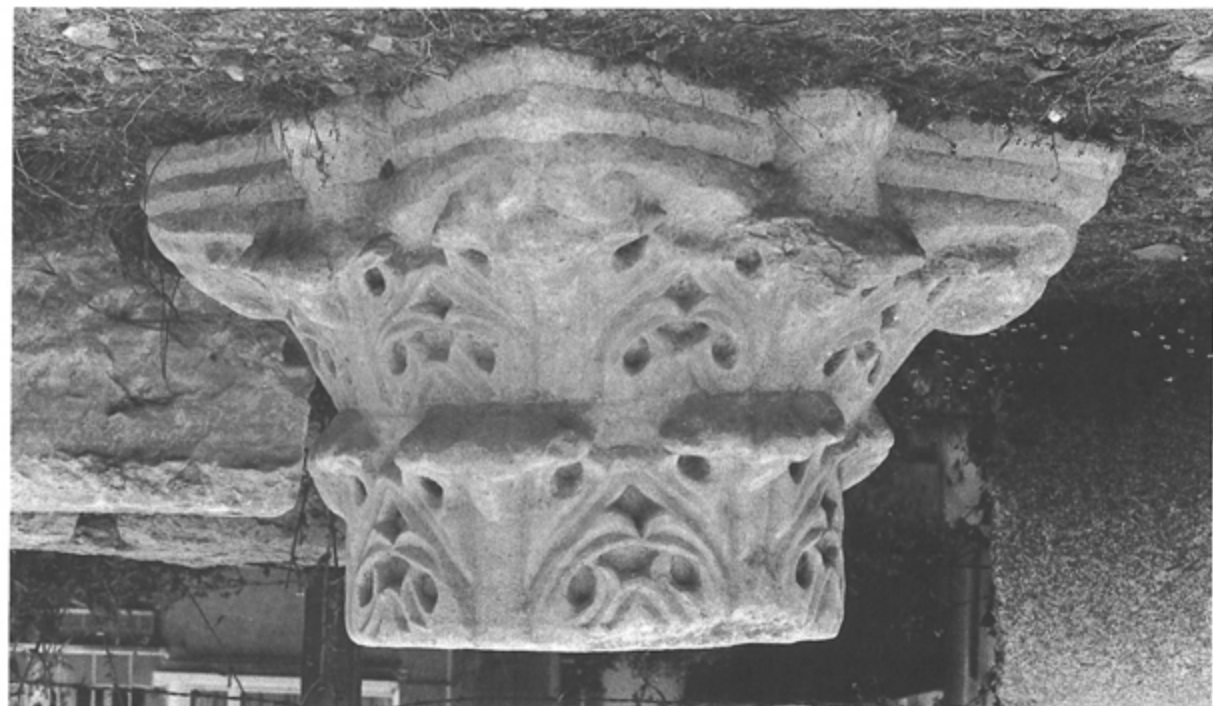
133. Detail of Barcelona capital, 3 d i



134. Joining Fragments of Unfinished Capital 3 d ii



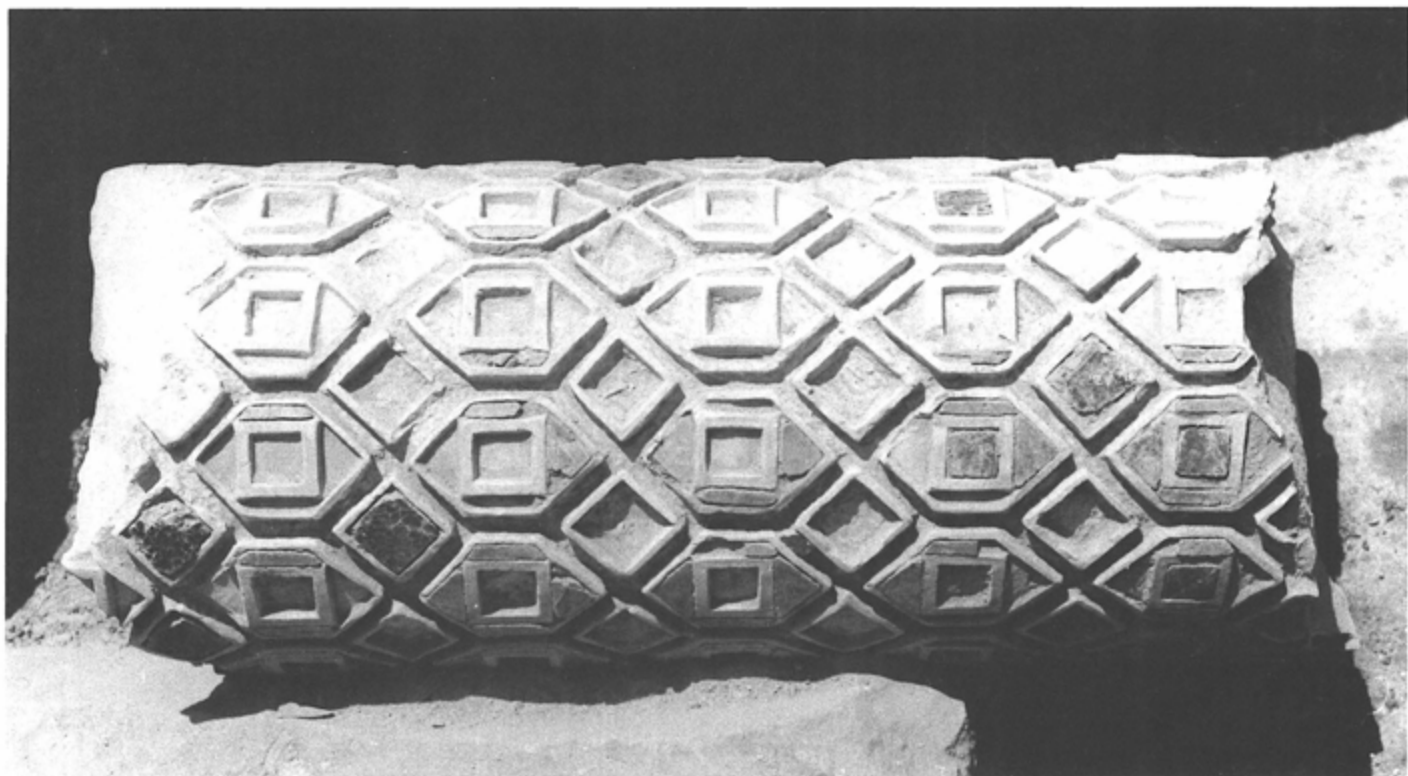
135. Capital-fragments 3 d v and vi



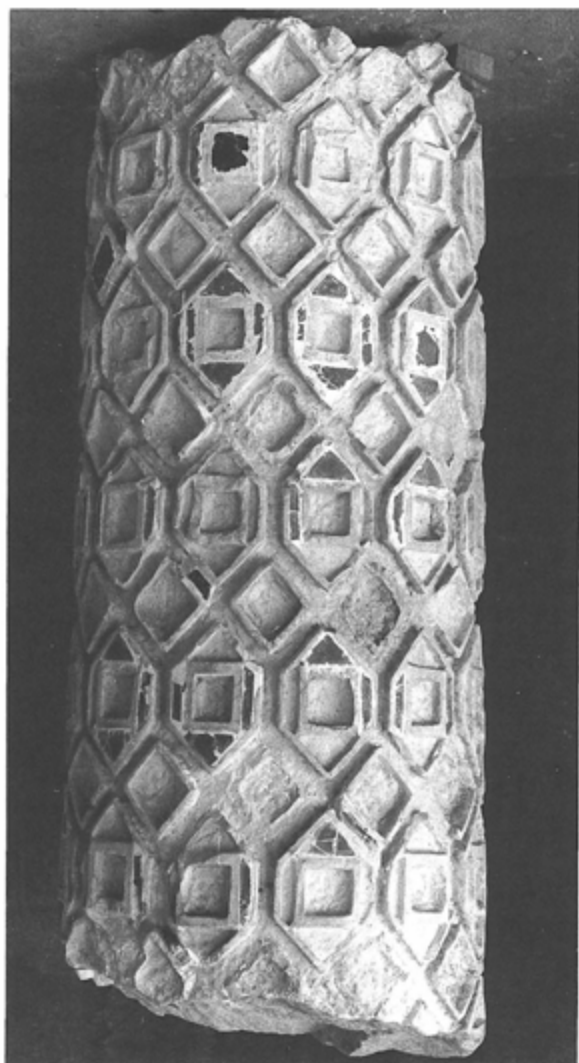
136. Corinthian Capital 3 e i



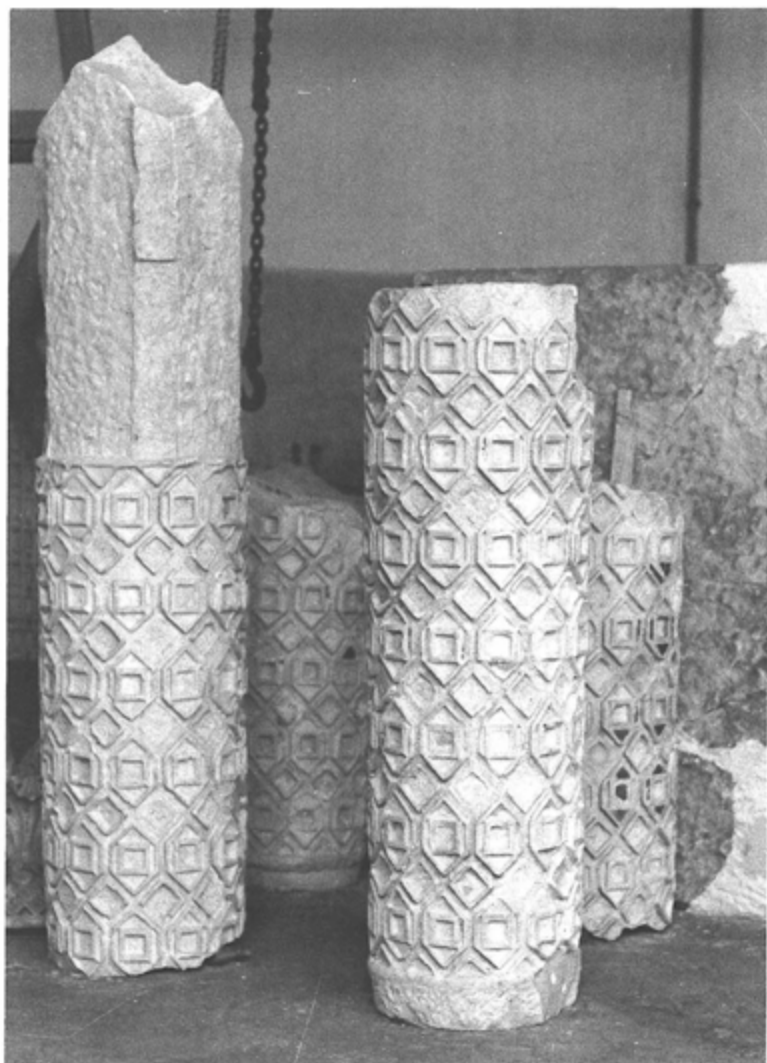
137. Ionic Impost Capital 3 f ii



138. Inlaid Column 4 a iv, as Found



139. Inlaid Column 4 a iv



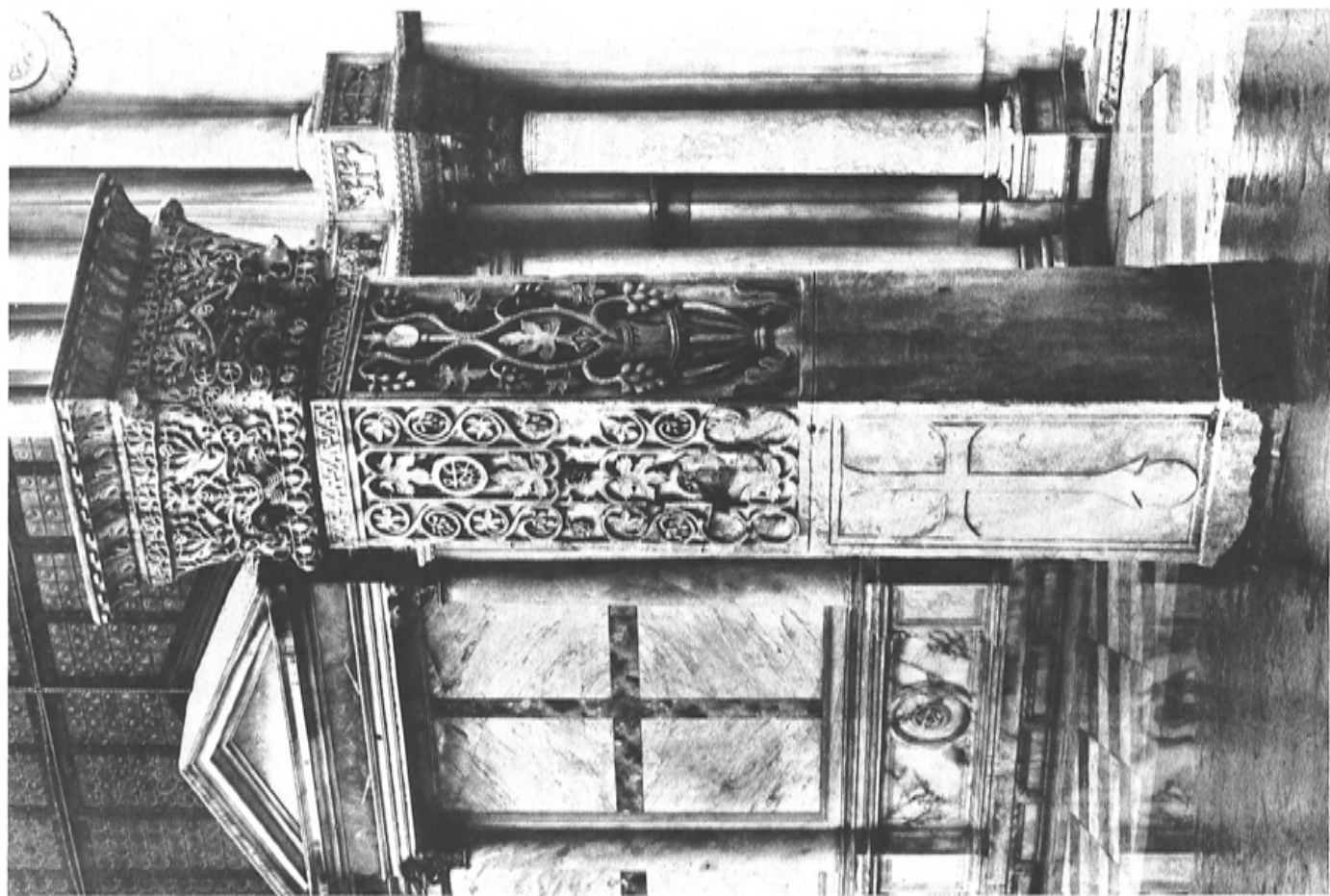
140. Inlaid Columns 4 a (from left to right) vi, i, v, and iv



141. Pier-capital 5 a i



142. Detail of 5 a i



143. Pier and Pier-capital in Venice, 5 a iii



144. Pier-capital in Venice, 5 a ii



145. Engaged Pier-capital 5 a iv, Front



146. Engaged Pier-capital 5 a iv, Side



147. Pier-capital 5 b i



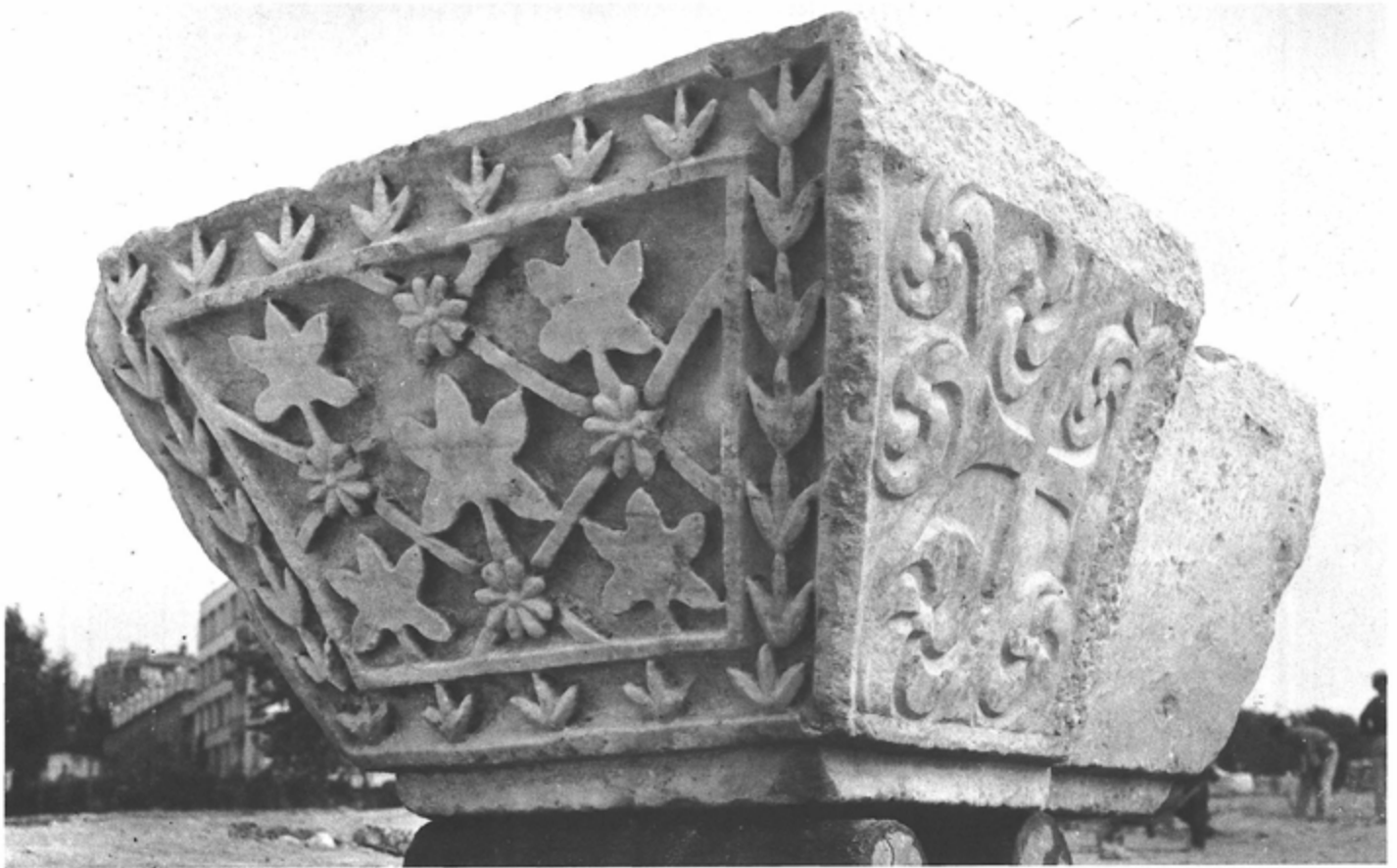
148. Pier-capital 5 b i



149. Fragment of Pier-capital, as 5 b i



150. Corner-boss of Pier-capital, as 5 b i



151. Pier-capital 5 c i



152. Pilaster-capital 5 e i



153. Pilaster-capital 5 d i



154. Pier in Venice, 6 a i



155. Pier in Venice, 6 a ii



156. Pier-fragment 6 a iii



157. Pilaster 6 a iv



158. Pier-fragment 6 b i



159. Pier 6 c i



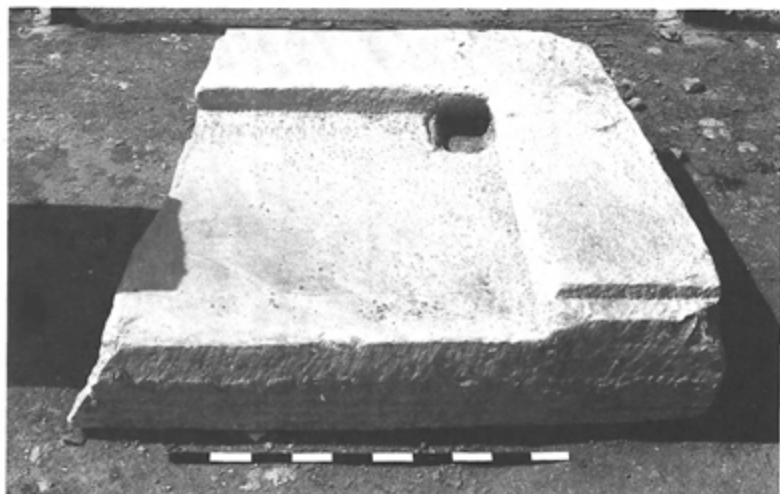
160. Column-base 7 b ii



161. Column-base 7 b iii



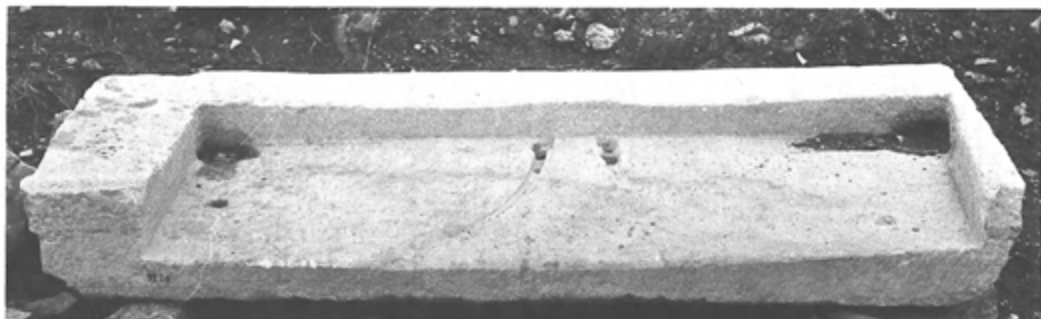
162. Column-base 7 d i



163. Threshold 8 a i



164. Threshold 8 a ii



165. Threshold 8 a vii



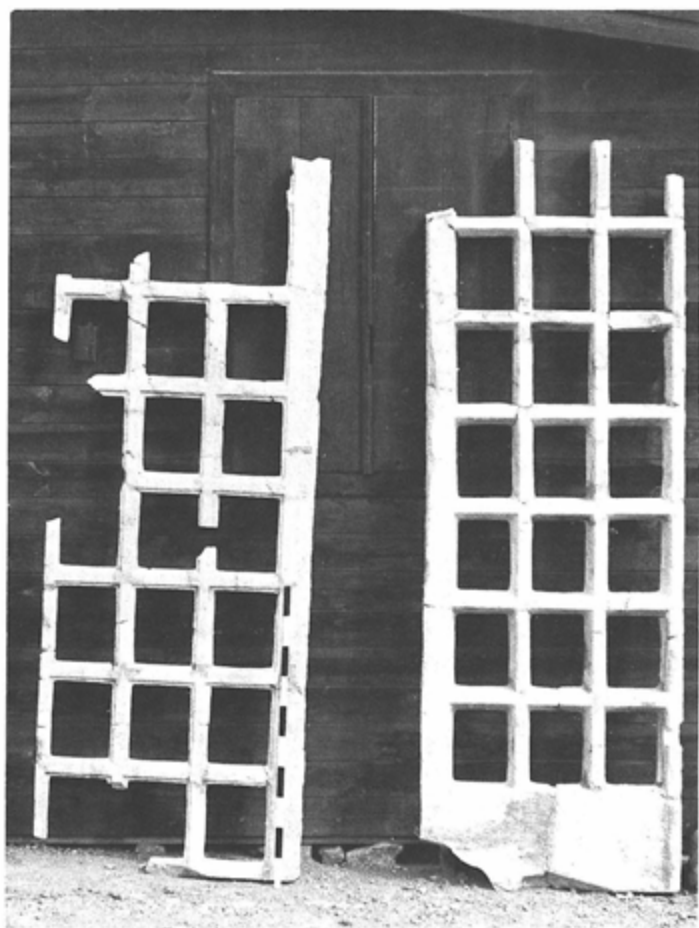
166. Decorated Block from Window-frame 10 e i



167. Back of Decorated Block from Window-frame 10 e i



168. Reserved Panel in Lower Part of Window-frame 10 e ii



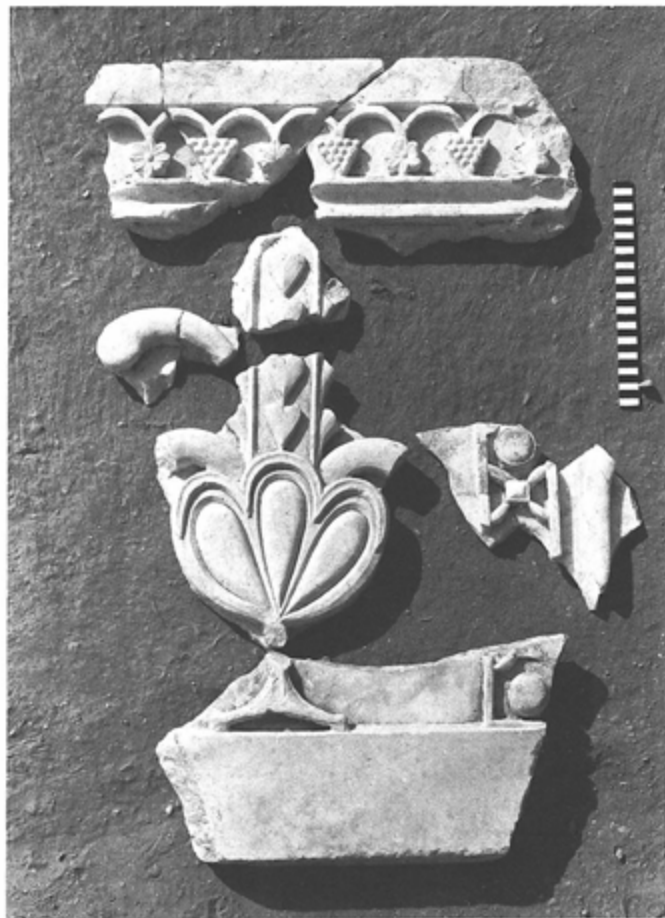
169. Window-frames as Reconstructed



170. Two Fragmentary Window-mullions



171. Screen in the Zeyrek Camii (Pantocrator)



172. Fragmentary Screen of Dokimian Marble 13 a i



173. Screen 13 b i



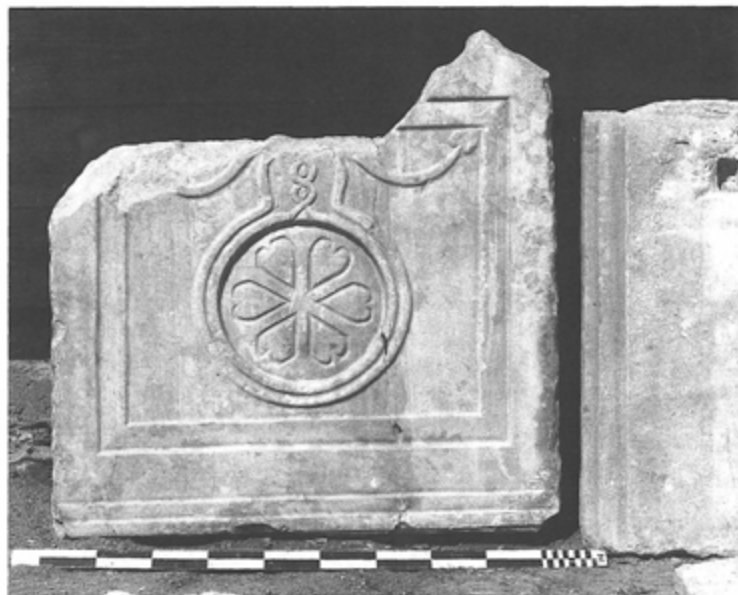
174. Screen 13 b ii



175. Screen 13 b iii



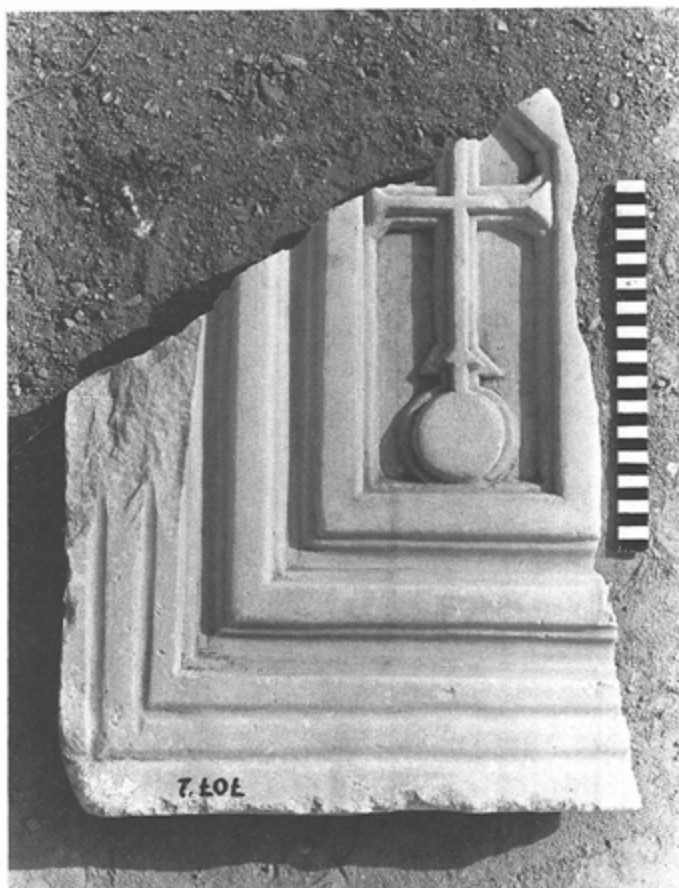
176. Screen 13 i iii



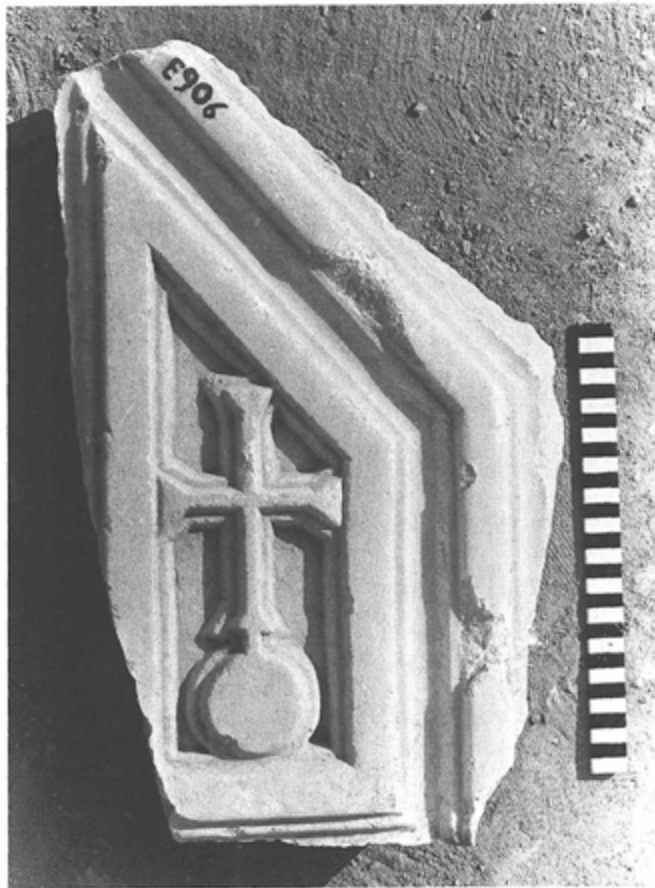
177. Screen 13 e i



178. Screen 13 f iii



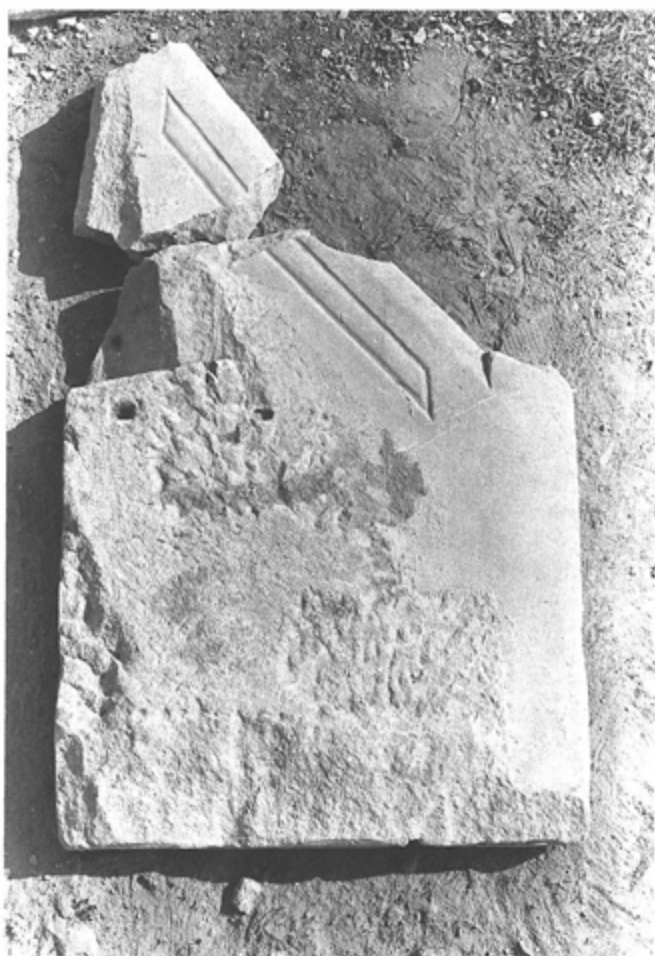
179. Staircase Panel 13 h i



180. Staircase Panel 13 h iii



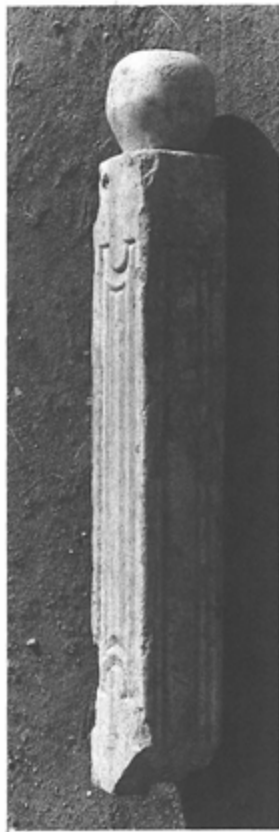
181. Staircase Panel 13 h ii, Front



182. Staircase Panel 13 h ii, Back



183. Engaged Colonnnette capital 14 a i



184. Post with Ovoid
Finial 14 c iii



185. Engaged Colonnnette



186. Curved Wall Panel 15 d i



187. Part of a Panel Similar to 15 d i



188. Cross-in-arcade Frieze 15 a i



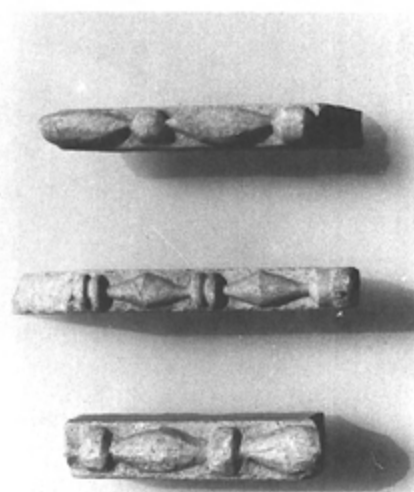
189. "Yoke" Frieze 15 b i



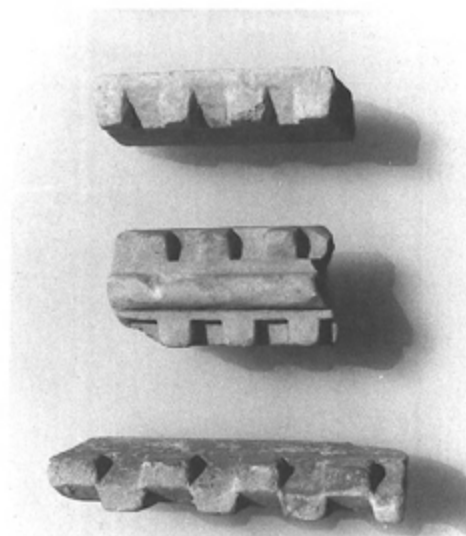
190. Vegetal Frieze 15 c i



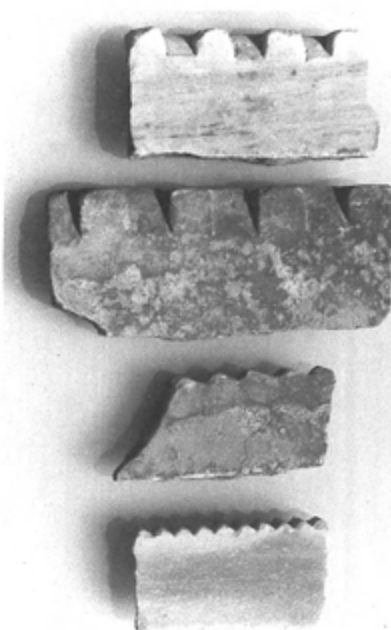
191. Skirting 16 a i



192. Examples of Bead-and-reel Beading (in elevation)



193. Examples of Beading. Types 17 d, e, and f



194. Examples of Dentil and Saw-tooth Beading



195. Examples of Bead-and-reel Beading (in plan)



196. Arch 18 a i



197. Panel with Christ 19 a i



198. Panel with Virgin and Child
19 a ii



199. Panel with Apostle 19 a iii



200. Panel with Apostle 19 a iv



201. Panel with Apostle 19 a v



202. Panel with Apostle 19 a vi



203. Panel with Apostle 19 a vii



204. Panel with Apostle 19 a viii



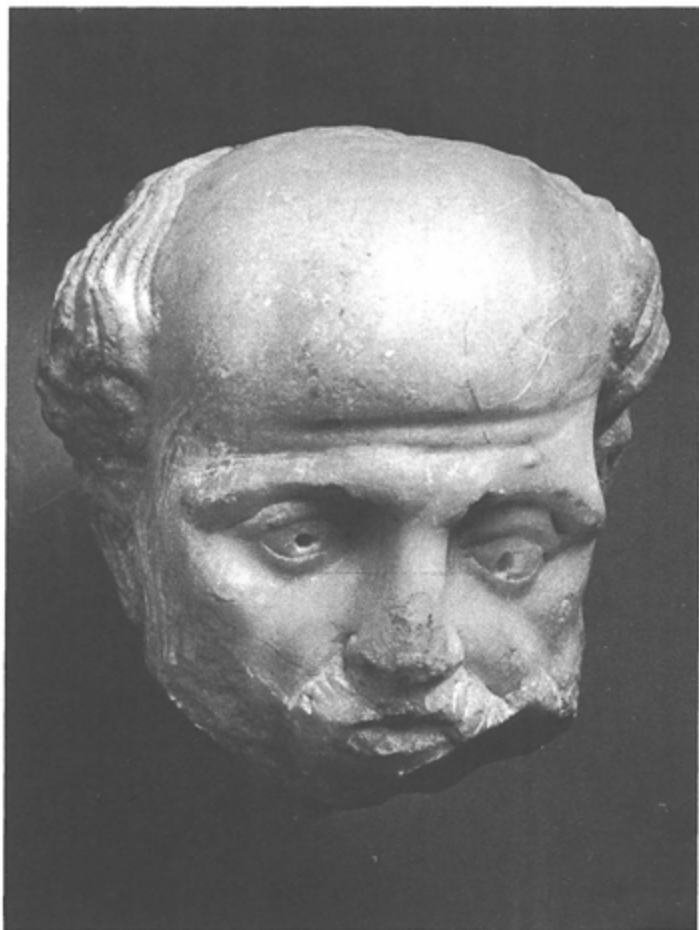
205. Panel with Apostle 19 a ix



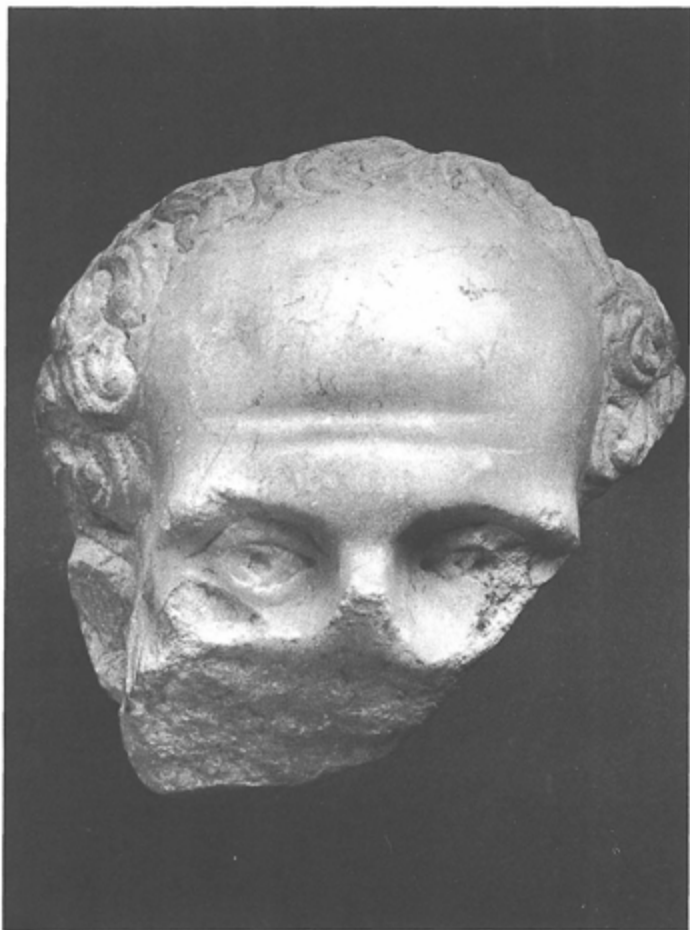
206. Panel with Apostle 19 a x



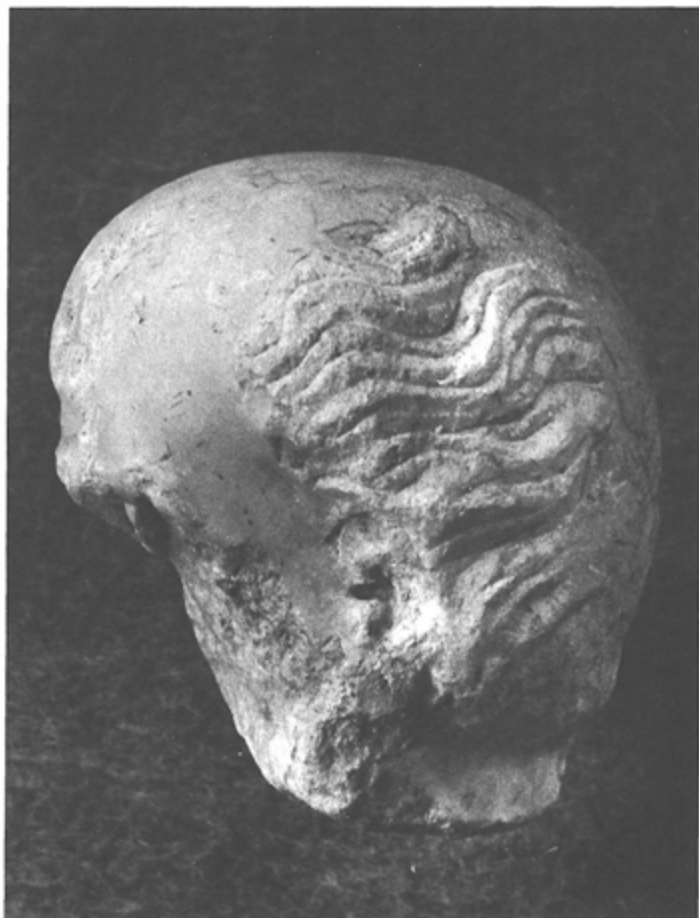
207. Head 19 b i (side view)



208. Head 19 b i



209. Head 19 b ii



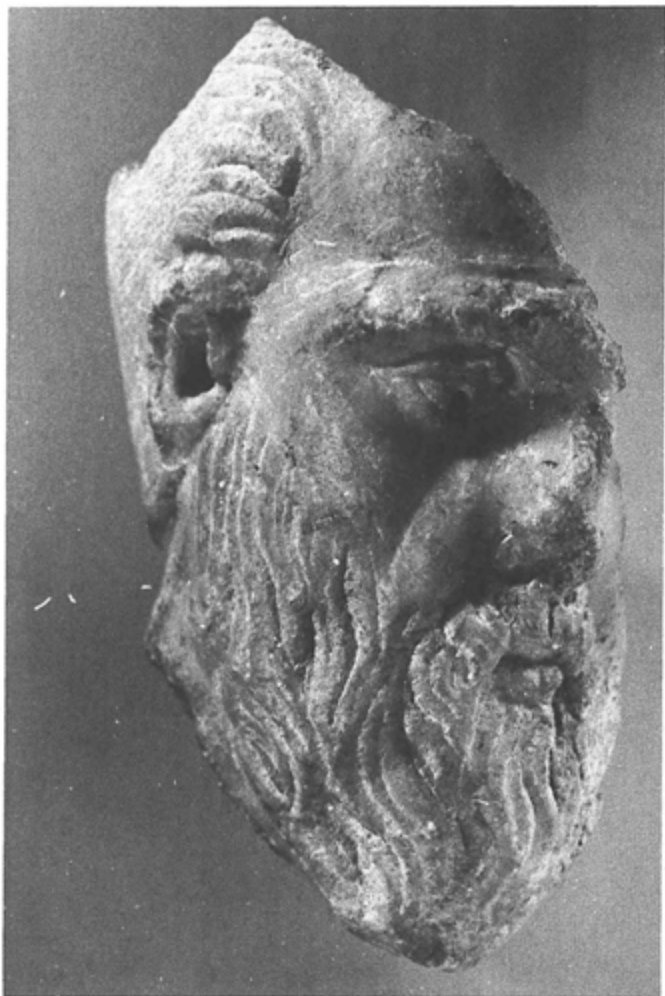
210. Head 19 b iii



211. Head 19 b iv



212. Head 19 b v



213. Head 19 b vi



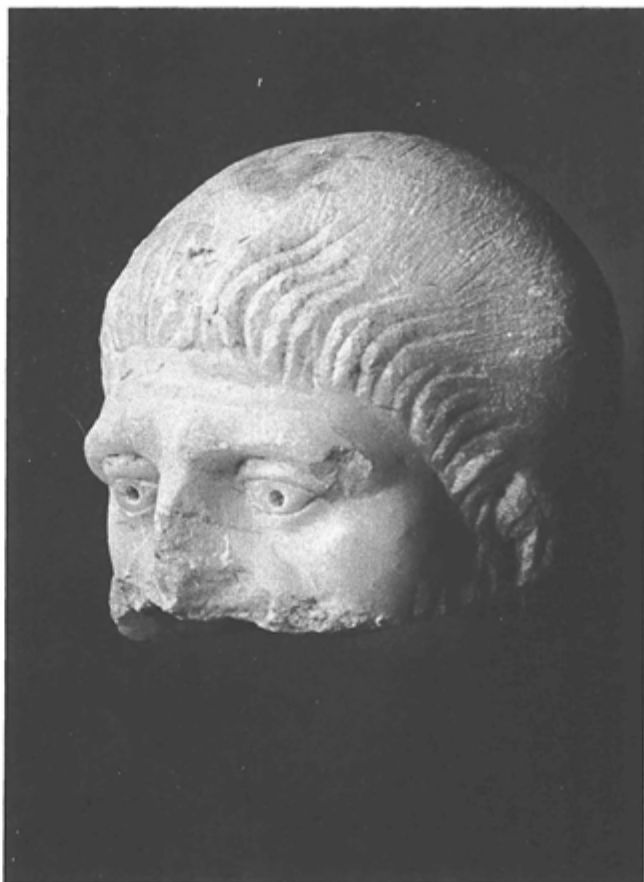
214. Head 19 b vii



215. Head 19 b viii



216. Head 19 b ix



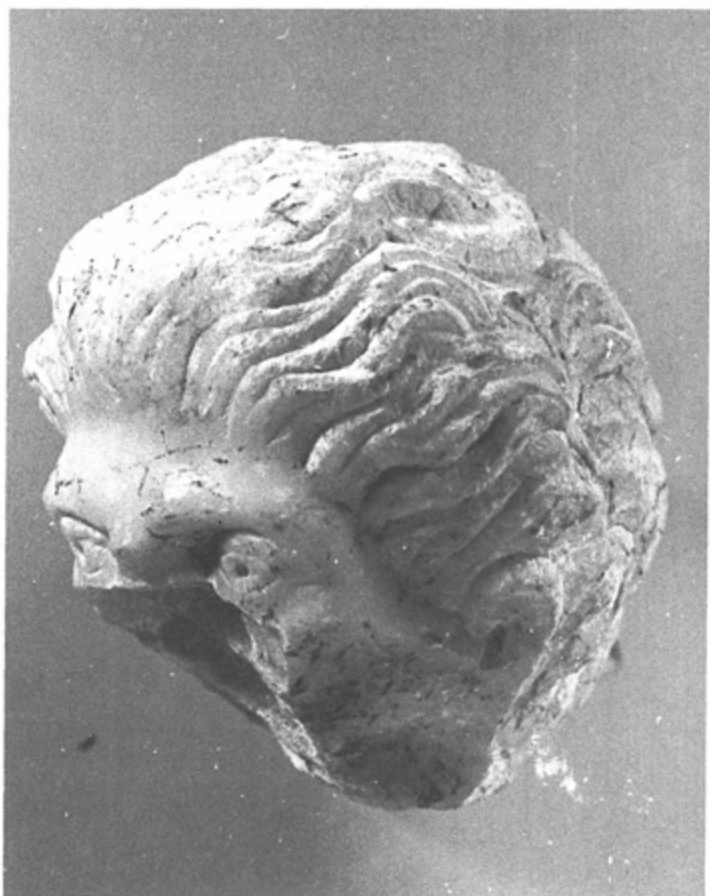
217. Head 19 b x



218. Head 19 b xi



219. Head 19 b xii



220. Head 19 b xiii



221. Head 19 b xiv



222. Head 19 b xv



223. Head 19 b xvi



224. Head 19 b xvii



225. Head 19 b xviii



226. Head 19 b xix



227. Head 19 b xx



228. Foot 19 c i



229. Foot 19 c vi



230. Hand 19 c xii



231. Wrist 19 c xvi



232. Fragment of (?) Arm 19 c xxi



233. Ridged and Studded Bar
with (?) Finger 19 c xxiv



234. Lion's Head Waterspout 20 a ii



235. Boar's Head Waterspout 20 a i



236. Fragment (of pier?) with Monogram 21 a i



237. Pedestal 21 c i



238. Hooked beak (of eagle?) 21 d i



239. Body of Small Bird 21 d iii



240. Body of Small Bird 21 d iv



241. Head of Small Bird 21 d v



242. Waste cores 21 h i



243. Lobe-like Elements 21 i i



244. Fragment of Pier(?) 21 j i



245. Three-lobed Acanthus Leaves 21 k i



246. Five-lobed Acanthus Leaves 21 l i



247. Large Cornucopiae 21 m i



248. Small Cornucopiae 21 n i



249. Pine-cones 21 o i



250. Eggs, Each Decorated with a Cross 21 p i



251. Multi-lobed Leaves 21 q i



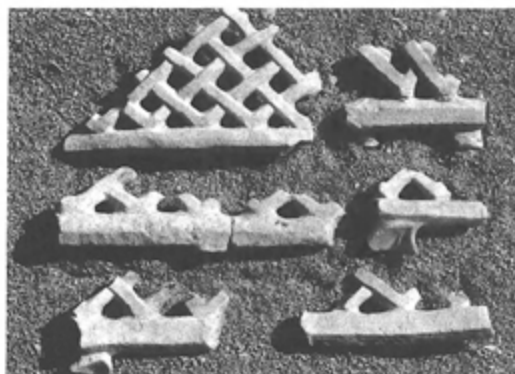
252. Fragment with Vinestem 21 r i



254. Unfinished Bunch of Grapes
21 t i



255. Large Leaf 21 u i



256. Selected Fragments of Lattice 21 v i-vi



257. Selected Fragments of Lattice 21 v vii-xi



258. Basket-capital in the Western Facade of S. Marco, Venice, 22 c ii



259. Pier-capital from Edirnekapi in Istanbul 22 d i



260. Upper Part of Pilaster from Region of Koca Mustafa Camii in Istanbul 22 e i



261. Body of Peacock from Topkapı Sarayı in Istanbul 22 g i



262. Zoomorphic Waterspouts in the Istanbul Archaeological Museum, Said to Have Come from Sarāḫane 22 j i-vi



263. Basket-capital in the Garden of St. Sophia, Istanbul 22 i i



264. Fragmentary Slab in Aquileia 22 k i



265. Screen in the Kunsthistorische Museum, Vienna 22 n i



266. Head in High Relief 23 a i



267. Head in High Relief 23 a iii



268. Egyptian Foot 23 b i



269. Torso 23 c i



270. Torso 23 c ii



271. Fragmentary Relief 23 d i



272. Fragmentary Relief 23 d ii



273. Stele 23 d iii



274. Fragmentary Stele 23 d v



275. Fragmentary Stele 23 d vii



276. Fragmentary Stele 23 d vi



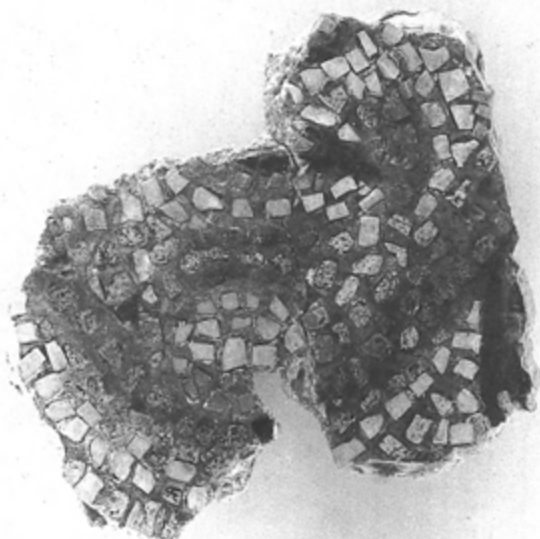
277. Fragmentary Stele with Gladiator 23 d ix



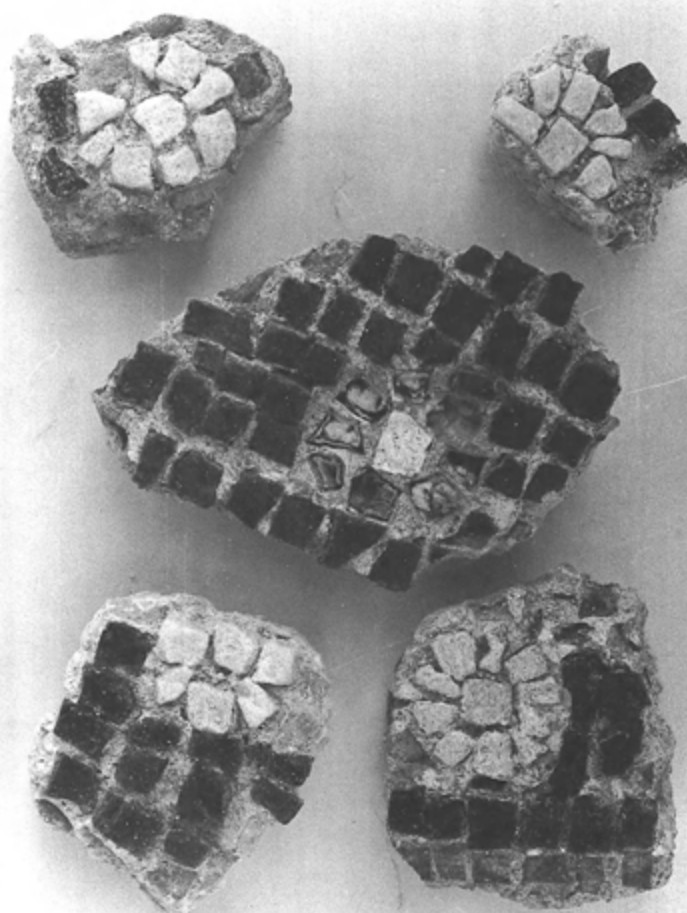
278. Fragment of Pavement-mosaic



279. Fragments of Mosaic Inscription (1 and 2)



280. Three Joining Fragments of Mosaic Making Up Lower Part of a Face (3)



281. Selection of Fragments with Circles (from top left to bottom right, 42, 43, 46, 47, and 41)



282. 3



285. 14



288. 18



291. 21



283. 11



292. 24



284. 12



293. 26



287. 16



286. 15



290. 20



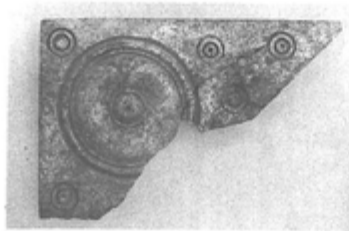
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298. 41



299. 42



300. 43



301. 44



302. 47



303. 50



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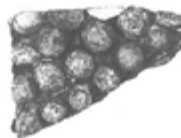
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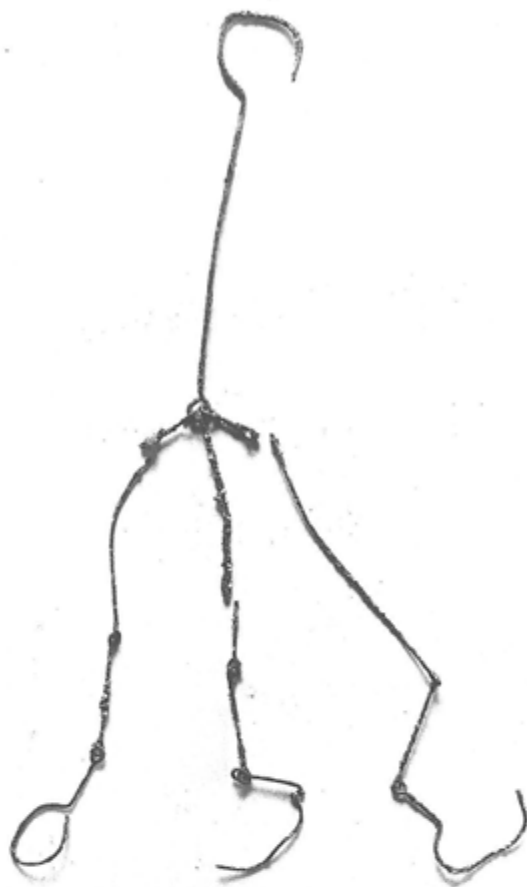
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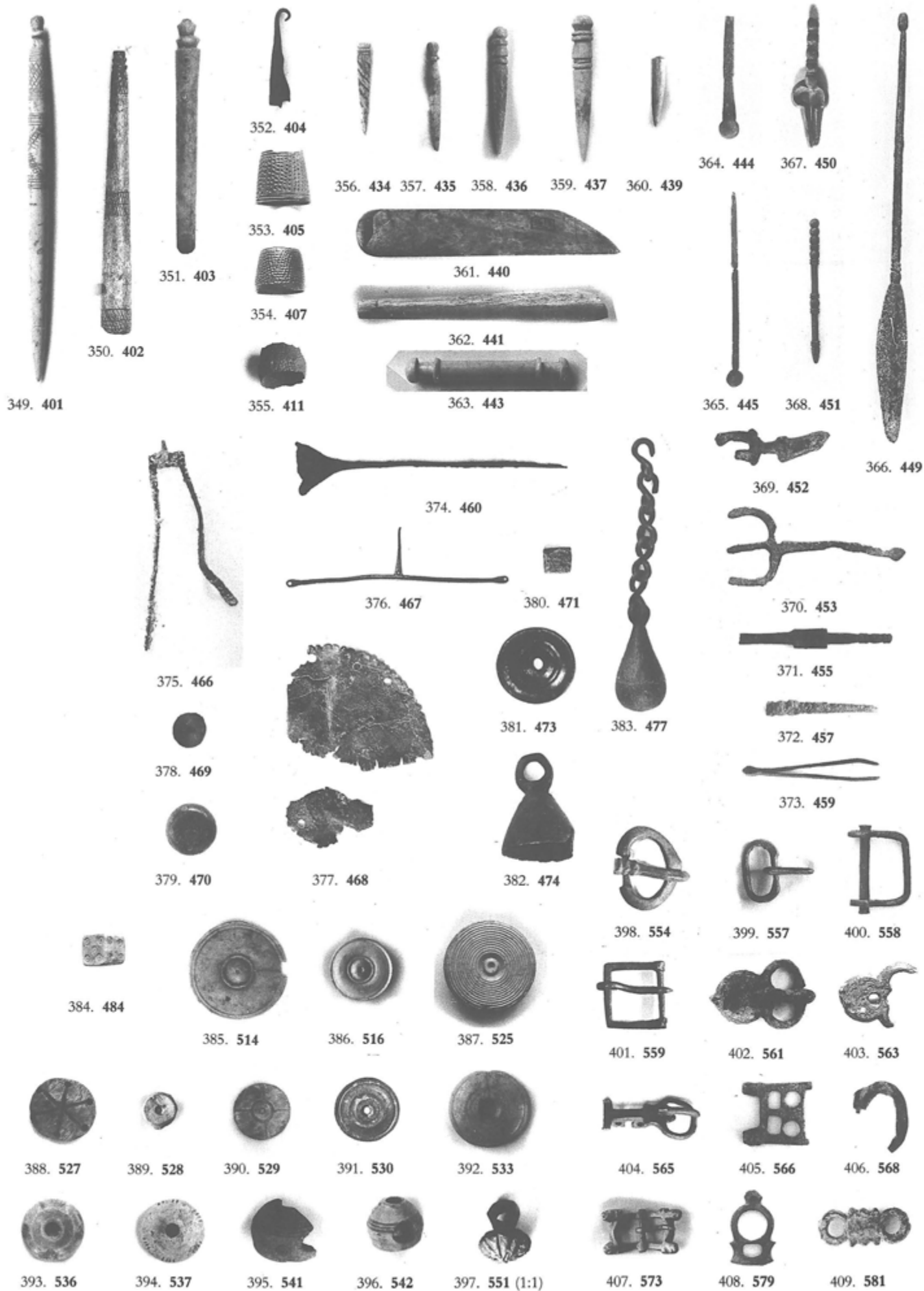
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417. 617



418. 618



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422. 622A



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420. 621A (1:1)



421. 621B (1:1)



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435. 635 (2:3)



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451. 705A (1:1)



452. 705B (1:1)



453. 706A



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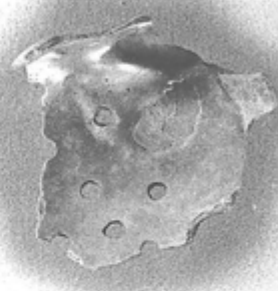
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462. 731A



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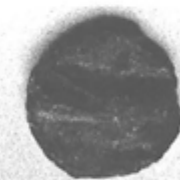
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468. 736A (1:1)



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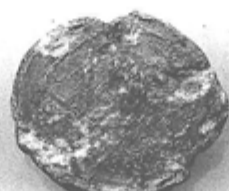
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